



THE  
INDIAN YEAR BOOK  
1916.

A STATISTICAL AND HISTORICAL ANNUAL OF  
THE INDIAN EMPIRE, WITH AN  
EXPLANATION OF THE  
PRINCIPAL TOPICS  
OF THE DAY

EDITED BY  
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**THIRD YEAR OF ISSUE.**

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# CALENDAR FOR 1916.

## January.

S	...	...	2	9	16	23	30
M	...	...	3	10	17	24	31
Tu	...	...	4	11	18	25	
W	...	...	5	12	19	26	
Th	..	...	6	13	20	27	...
F	..	...	7	14	21	28	
S	...	1	8	15	22	29	

## February

S	.	...	6	13	20	27	
M	.	...	7	14	21	28	
Tu	...	1	8	15	22	29	
W	...	2	9	16	23		
Th	...	3	10	17	24	..	
F	..	4	11	18	25	..	
S	.	5	12	19	26		

## March

S	...	...	5	12	19	26	
M	...	...	6	13	20	27	
Tu	...	...	7	14	21	28	
W	..	1	8	15	22	29	
Th	..	2	9	16	23	30	
F	..	3	10	17	24	31	
S	...	4	11	18	25		

## April.

S	...	...	2	9	16	23	30
M	..	...	3	10	17	24	
Tu	...	...	4	11	18	25	
W	...	...	5	12	19	26	
Th	..	...	6	13	20	27	
F	..	...	7	14	21	28	..
S	..	1	8	15	22	29	

## May.

S.	.....	..	7	14	21	28	...
M	.....	1	8	15	22	29	..
Tu	.....	2	9	16	23	30	
W	..	3	10	17	24	31	..
Th	...	4	11	18	25	...	...
F	.	5	12	19	26	...	..
S	.	6	13	20	27	..	...

## June

S	....	..	4	11	18	25	..
M	....	...	5	12	19	26	
Tu	....	...	6	13	20	27	...
W	....	.	7	14	21	28	...
Th	..	1	8	15	22	29	..
F	....	2	9	16	23	30	..
S	..	3	10	17	24	...	

## July

S	...	...	2	9	16	23	30
M	...	...	3	10	17	24	31
Tu	..	...	4	11	18	25	
W	...	...	5	12	19	26	
Th	..	...	6	13	20	27	...
F	..	...	7	14	21	28	...
S	...	1	8	15	22	29	

## August

S	.	...	6	13	20	27	..
M	.	...	7	14	21	28	
Tu	...	1	8	15	22	29	
W	..	2	9	16	23	30	
Th	...	3	10	17	24	31	
F	..	4	11	18	25	..	
S	..	5	12	19	26		

## September

S	...	...	3	10	17	24	
M	...	...	4	11	18	25	
Tu	..	...	5	12	19	26	
W	...	...	6	13	20	27	
Th	..	...	7	14	21	28	
F	..	1	8	15	22	29	
S	...	2	9	16	23	30	

## October

S	...	1	8	15	22	29	
M	..	2	9	16	23	30	..
Tu	...	3	10	17	24	31	
W	...	4	11	18	25	..	..
Th	..	5	12	19	26	..	..
F	...	6	13	20	27	..	..
S	..	7	14	21	28	..	...

## November

S	...	...	5	12	19	26	...
M	..	...	6	13	20	27	..
Tu	...	...	7	14	21	28	..
W	...	1	8	15	22	29	..
Th	...	2	9	16	23	30	...
F	...	3	10	17	24		..
S	...	4	11	18	25		...

## December.

S.	....	...	3	10	17	24	31
M	....	...	4	11	18	25	...
Tu	....	...	5	12	19	26	
W	....	...	6	13	20	27	...
Th	...	...	7	14	21	28	...
F	...	1	8	15	22	29	...
S	....	2	9	16	23	30	



# Phases of the Moon—FEBRUARY 29 Days

● New Moon  
 ☾ First Quarter  
 In Perigee

3rd, 9h 35 6m P M  
 11th, 3h 50 4m A M  
 2nd, 5 6h A M

○ Full Moon  
 ☾ Last Quarter  
 In Apogee

10th 7h 7 6m A M  
 26th 2h 52 9m P M  
 14th 12 0h A M

Day of the Week	Day of the Month	Day of the Year	Mean Time			Moon's Age at Noon	Sun's Declination at Mean Noon
			Sunrise A M	Sunset P M	True Noon		
			H M	H M	H M	D	S
Tuesday	1	32	7 14	6 31	0 51	27 10	17 27
Wednesday	2	33	7 13	6 32	0 52	28 10	17 11
Thursday	3	34	7 13	6 33	0 53	29 10	16 53
Friday	4	35	7 13	6 33	0 53	0 63	16 36
Saturday	5	36	7 12	6 34	0 53	1 63	16 18
Sunday	6	37	7 12	6 34	0 53	2 63	16 0
Monday	7	38	7 12	6 35	0 53	3 63	15 42
Tuesday	8	39	7 11	6 35	0 53	4 63	15 23
Wednesday	9	40	7 11	6 36	0 53	5 63	15 5
Thursday	10	41	7 10	6 36	0 53	6 63	14 45
Friday	11	42	7 10	6 37	0 53	7 63	14 32
Saturday	12	43	7 9	6 37	0 53	8 63	14 7
Sunday	13	44	7 9	6 37	0 53	9 63	13 47
Monday	14	45	7 9	6 38	0 53	10 63	13 27
Tuesday	15	46	7 8	6 39	0 53	11 63	13 7
Wednesday	16	47	7 7	6 39	0 53	12 63	12 46
Thursday	17	48	7 7	6 40	0 53	13 63	12 25
Friday	18	49	7 6	6 40	0 53	14 63	12 5
Saturday	19	50	7 6	6 40	0 53	15 63	11 44
Sunday	20	51	7 5	6 41	0 53	16 63	11 22
Monday	21	52	7 5	6 41	0 53	17 63	11 1
Tuesday	22	53	7 4	6 42	0 53	18 63	10 39
Wednesday	23	54	7 3	6 42	0 52	19 63	10 18
Thursday	24	55	7 3	6 42	0 52	20 63	9 56
Friday	25	56	7 2	6 43	0 52	21 63	9 34
Saturday	26	57	7 1	6 43	0 52	22 63	9 11
Sunday	27	58	7 1	6 43	0 52	23 63	8 49
Monday	28	59	7 0	6 44	0 52	24 63	8 27
Tuesday	29	60	6 59	6 44	0 52	25 63	8 4

# Phases of the Moon—MARCH 31 Days

1st Quarter 10h 56 7m P.M.  
New Moon 26th, 0h 52 4m P.M.  
Full Moon 16th 6 7 P.M.

1st Quarter  
New Moon  
Full Moon

10th, 10h 56 7m P.M.  
26th, 0h 52 4m P.M.  
16th 6 7 P.M.

Day of the Week	Day of the Month	Sun at AM	Sun at PM	Mean Time		True Noon	Moon's Age at Noon	Sun's Declination at Mean Noon
				H	M			
Monday	1	6	9	6	44	0 51	26 63	7 41
Tuesday	2	6	58	6	45	0 51	27 03	7 18
Wednesday	3	6	57	6	45	0 51	28 61	6 56
Thursday	4	6	56	6	45	0 51	0 14	6 33
Friday	5	6	56	6	46	0 50	1 14	6 9
Saturday	6	6	55	6	46	0 50	2 14	5 46
Sunday	7	6	54	6	46	0 50	3 14	5 23
Monday	8	6	53	6	47	0 50	4 14	5 0
Tuesday	9	6	52	6	47	5 50	5 14	4 36
Wednesday	10	6	52	6	47	0 49	6 14	4 13
Thursday	11	6	51	6	45	0 49	7 14	3 49
Friday	12	6	50	6	48	0 49	8 14	3 26
Saturday	13	6	49	6	48	0 48	9 14	3 2
Sunday	14	6	48	6	48	0 46	10 14	2 38
Monday	15	6	47	6	49	0 48	11 14	2 15
Tuesday	16	6	46	6	49	0 48	12 14	1 51
Wednesday	17	6	45	6	49	0 47	13 14	1 27
Thursday	18	6	44	6	49	0 47	14 14	1 4
Friday	19	6	44	6	50	0 47	15 14	0 40
Saturday	20	6	43	6	50	0 46	16 14	0 16
Sunday	21	6	42	6	50	0 46	17 14	0 17
Monday	22	6	41	6	50	0 46	18 14	0 31
Tuesday	23	6	40	6	51	0 46	19 14	0 55
Wednesday	24	6	39	6	51	0 45	20 14	1 19
Thursday	25	6	39	6	51	0 45	21 14	1 42
Friday	26	6	38	6	51	0 45	22 14	2 6
Saturday	27	6	37	6	51	0 44	23 14	2 29
Sunday	28	6	37	6	52	0 44	24 14	2 53
Monday	29	6	36	6	52	0 44	25 14	3 16
Tuesday	30	6	35	6	52	0 43	26 14	3 39
Wednesday	31	6	34	6	52	0 43	27 14	4 3

# Phases of the Moon—APRIL 30 Days

● New Moon ... 2nd, 9h 51 2m P M  
 ☾ First Quarter 10th, 8h 57m P M  
 In Apogee 9th, 7 2h P M

○ Full Moon .. 18th, 10h 37<sup>h</sup> 4m A M  
 ☾ Last Quarter 25th 4h 8<sup>h</sup> 0m A M  
 In Perigee .. 21st, 5 1h P M

Day of the Week.	Day of the Month	Day of the Year	Mean Time						Moon's Age at Noon	Sun's Declination at Mean Noon
			Sunrise A M		Sunset P M		True Noon			
			H	M	H	M	H	M	D	N.
Saturday	1	92	6	23	6	53	0	43	23 11	4 26
Sunday	2	93	6	33	6	53	0	43	23 14	4 40
Monday	3	94	6	32	6	53	0	42	0 62	5 12
Tuesday	4	95	6	31	6	53	0	42	1 62	5 35
Wednesday	5	96	6	30	6	54	0	42	2 62	5 58
Thursday	6	97	6	29	6	54	0	41	3 62	6 21
Friday	7	98	6	28	6	54	0	41	4 62	6 48
Saturday	8	99	6	28	6	54	0	41	5 62	7 6
Sunday	9	100	6	27	6	54	0	40	6 62	7 28
Monday	10	101	6	26	6	54	0	40	7 62	7 50
Tuesday	11	102	6	25	6	55	0	40	8 62	8 13
Wednesday	12	103	6	24	6	55	0	40	9 62	8 35
Thursday	13	104	6	24	6	55	0	39	10 62	8 57
Friday	14	105	6	23	6	56	0	39	11 62	9 18
Saturday	15	106	6	22	6	56	0	39	12 62	9 40
Sunday	16	107	6	21	6	56	0	39	13 62	10 1
Monday	17	108	6	21	6	56	0	38	14 62	10 22
Tuesday	18	109	6	20	6	57	0	38	15 62	10 44
Wednesday	19	110	6	19	6	57	0	38	16 62	11 4
Thursday	20	111	6	19	6	57	0	38	17 62	11 25
Friday	21	112	6	18	6	57	0	38	18 62	11 46
Saturday	22	113	6	17	6	57	0	37	19 62	12 6
Sunday	23	114	6	16	6	58	0	37	20 62	12 26
Monday	24	115	6	16	6	58	0	37	21 62	12 46
Tuesday	25	116	6	15	6	58	0	37	22 62	13 6
Wednesday	26	117	6	14	6	59	0	37	23 62	13 25
Thursday	27	118	6	14	6	59	0	36	24 62	13 45
Friday	28	119	6	13	7	0	0	36	25 62	14 4
Saturday	29	120	6	12	7	0	0	36	26 62	14 22
Sunday	30	121	6	12	7	0	0	36	27 62	14 41





# Phases of the Moon—JUNE 30 Days

● New Moon  
 ☾ First Quarter  
 In Apogee

1st, 1h 7 3m A M  
 9th, 5h 29 0m A M  
 4th, 3 0h A M

○ Full Moon  
 ☾ Last Quarter  
 ● New Moon  
 In Perigee

16th, 3h 11 7m A M  
 22nd, 6h 16 4m P M  
 30th, 1h 13 1m P M  
 16th, 4 1h P M

Day of the Week	Day of the Month	Day of the Year	Mean Time						Moon's Age at Noon	Sun's Declination at Mean Noon	
			Sunrise A M		Sunset P M		True Noon			D	N
			H	M	H	M	H	M			
Thursday	1	153	6	1	7	12	0	36	0 49	22 1	
Friday	2	154	6	1	7	12	0	36	1 48	22 9	
Saturday	3	155	6	1	7	13	0	37	2 48	22 17	
Sunday	4	156	6	1	7	13	0	37	3 48	22 24	
Monday	5	157	6	1	7	14	0	37	4 48	22 31	
Tuesday	6	158	6	1	7	14	0	37	5 48	22 38	
Wednesday	7	159	6	1	7	14	0	37	6 48	22 44	
Thursday	8	160	6	1	7	15	0	38	7 48	22 50	
Friday	9	161	6	1	7	15	0	38	8 48	22 55	
Saturday	10	162	6	1	7	15	0	38	9 48	23 0	
Sunday	11	163	6	1	7	16	0	38	10 48	23 4	
Monday	12	164	6	1	7	16	0	38	11 48	23 8	
Tuesday	13	165	6	1	7	16	0	39	12 48	23 12	
Wednesday	14	166	6	1	7	17	0	39	13 48	23 15	
Thursday	15	167	6	1	7	17	0	39	14 48	23 18	
Friday	16	168	6	1	7	17	0	39	15 48	23 21	
Saturday	17	169	6	1	7	17	0	40	16 48	23 23	
Sunday	18	170	6	2	7	18	0	40	17 48	23 25	
Monday	19	171	6	2	7	18	0	40	18 48	23 26	
Tuesday	20	172	6	2	7	18	0	40	19 48	23 27	
Wednesday	21	173	6	2	7	18	0	40	20 48	23 27	
Thursday	22	174	6	3	7	19	0	41	21 48	23 27	
Friday	23	175	6	3	7	19	0	41	22 48	23 27	
Saturday	24	176	6	3	7	19	0	41	23 48	23 26	
Sunday	25	177	6	3	7	19	0	41	24 48	23 25	
Monday	26	178	6	3	7	19	0	41	25 48	23 23	
Tuesday	27	179	6	4	7	19	0	42	26 48	23 21	
Wednesday	28	180	6	4	7	20	0	42	27 48	23 18	
Thursday	29	181	6	4	7	20	0	42	28 48	23 15	
Friday	30	182	6	5	7	20	0	42	29 48	23 12	

# Phases of the Moon—JULY 31 Days.

☾ First Quarter 8th 5h 25 0m P M  
 ○ Full Moon 15th 10h 10 0m A M  
 In Apogee 1st 9 7h A M

☾ Last Quarter 22nd, 5h 3 0m A M  
 ● New Moon 30th, 7h 45 4m A M  
 In Perigee 15th, 5 8h A M  
 25th 1 0h P M

Day of the Week	Day of the Month	Day of the Year	Mean Time						Moon's Age at Noon	Sun's Declination at Mean Noon
			Sunrise A.M.		Sunset P.M.		True Noon			
			H	M	H	M	H	M	D	N.
Saturday	1	183	6	5	7	20	0	42	0 85	23 9
Sunday	2	184	6	5	7	20	0	42	1 85	23 4
Monday	3	185	6	6	7	20	0	43	2 85	23 0
Tuesday	4	186	6	6	7	20	0	43	3 85	22 55
Wednesday	5	187	6	6	7	20	0	43	4 85	22 50
Thursday	6	188	6	7	7	20	0	43	5 85	22 44
Friday	7	189	6	7		20	0	44	6 05	22 38
Saturday	8	190	6	7	7	20	0	44	7 85	22 31
Sunday	9	191	6	8	7	20	0	44	8 85	22 25
Monday	10	192	6	8	7	20	0	44	9 85	22 17
Tuesday	11	193	6	8	7	20	0	44	10 85	22 10
Wednesday	12	194	6	9	7	20	0	44	11 85	22 2
Thursday	13	195	6	9	7	20	0	44	12 85	21 53
Friday	14	196	6	9	7	20	0	44	13 85	21 44
Saturday	15	197	6	9	7	20	0	45	14 85	21 35
Sunday	16	198	6	10	7	19	0	45	15 85	21 26
Monday	17	199	6	10	7	19	0	45	16 85	21 16
Tuesday	18	200	6	10	7	19	0	45	17 85	21 6
Wednesday	19	201	6	11	7	19	0	45	18 85	20 55
Thursday	20	202	6	11	7	19	0	45	19 85	20 44
Friday	21	203	6	12	7	19	0	45	20 85	20 33
Saturday	22	204	6	12	7	18	0	45	21 85	20 21
Sunday	23	205	6	13	7	18	0	45	22 85	20 9
Monday	24	206	6	13	7	17	0	45	23 85	19 57
Tuesday	25	207	6	14	7	17	0	45	24 85	19 44
Wednesday	26	208	6	14	7	17	0	45	25 85	19 31
Thursday	27	209	6	14	7	16	0	45	26 95	19 18
Friday	28	210	6	14	7	16	0	45	27 85	19 4
Saturday	29	211	6	15	7	16	0	45	28 85	18 50
Sunday	30	212	6	15	7	15	0	45	0 21	18 36
Monday	31	213	6	15	7	15	0	45		

# Phases of the Moon—AUGUST 31 Days.

☾ First Quarter 7th, 2h 35 6m A M  
 ○ Full Moon 13th, 5h 30 3m P M  
 ♀ In Perigee 12th, 2 8h P M

☾ Last Quarter 20th 6h 24 9m P M  
 ● New Moon 24th 10h 54 7m P M  
 ♀ In Apogee 21th, 10 5h P M

Day of the Week	Day of the Month	Day of the Year	Mean Time			Moon's Age at Noon	Sun's Declination at Mean Noon
			Sunrise A M	Sunset P M	True Noon		
			H M	H M	P M	D	Δ
Tuesday	1	214	6 10	7 11	0 15	2 21	18 7
Wednesday	2	215	6 10	7 14	0 15	3 21	17 52
Thursday	3	216	6 10	7 14	0 45	4 21	17 36
Friday	4	217	6 17	7 13	0 45	5 21	17 20
Saturday	5	218	6 17	7 13	0 15	6 21	17 4
Sunday	6	219	6 17	7 12	0 45	7 21	16 48
Monday	7	220	6 18	7 11	0 44	8 21	16 31
Tuesday	8	221	6 18	7 11	0 44	9 21	16 15
Wednesday	9	222	6 18	7 11	0 44	10 21	15 5
Thursday	10	223	6 18	7 10	0 14	11 21	15 29
Friday	11	224	6 10	7 9	0 14	12 21	15 21
Saturday	12	225	6 10	7 9	0 44	13 21	15 5
Sunday	13	226	6 19	7 8	0 44	14 21	14 47
Monday	14	227	6 20	7 7	0 43	15 21	14 28
Tuesday	15	228	6 20	7 7	0 43	16 31	14 10
Wednesday	16	229	6 20	7 6	0 43	17 21	13 51
Thursday	17	230	6 20	7 6	0 43	18 21	13 32
Friday	18	231	6 21	7 5	0 43	19 21	13 13
Saturday	19	232	6 21	7 4	0 42	20 21	12 53
Sunday	20	233	6 21	7 3	0 42	21 21	12 34
Monday	21	234	6 22	7 3	0 42	22 21	12 14
Tuesday	22	235	6 22	7 2	0 42	23 21	11 54
Wednesday	23	236	6 22	7 1	0 41	24 21	11 34
Thursday	24	237	6 22	7 1	0 41	25 21	11 13
Friday	25	238	6 22	7 0	0 41	26 21	10 53
Saturday	26	239	6 23	6 59	0 41	27 21	10 32
Sunday	27	240	6 23	6 58	0 40	28 21	10 11
Monday	28	241	6 23	6 57	0 40	29 21	9 50
Tuesday	29	242	6 23	6 56	0 40	0 57	9 29
Wednesday	30	243	6 23	6 56	0 39	1 57	9 7
Thursday	31	244	6 24	6 56	0 39	2 57	8 46

# Phases of the Moon—SEPTEMBER 30<sup>c</sup> Days

☾ First Quarter 5th 9h 56.5m A.M.  
 ☾ Full Moon 12th 2h 0.9m A.M.  
 ☾ In Perigee 9th 6.9h P.M.

☾ Last Quarter 18th, 11h 5.3m A.M.  
 ● New Moon 27th, 1h 4.1m P.M.  
 ☾ In Apogee 21st, 8.1m P.M.

Day of the Week.	Day of the Month	Day of the Year	Mean Time						Moon's Age at Noon	Sun's Declination at Mean Noon
			Sunrise A M		Sunset P M		True Noon			
			H	M	H	M	P	M	D	N
Friday	1	245	6	24	6	54	0	38	3 57	8 24
Saturday	2	246	6	24	6	53	0	38	4 57	8 2
Sunday	3	247	6	24	6	53	0	38	5 57	7 40
Monday	4	248	6	24	6	52	0	38	6 57	7 18
Tuesday	5	249	6	25	6	51	0	37	7 57	6 56
Wednesday	6	250	6	25	6	50	0	37	8 57	6 34
Thursday	7	251	6	25	6	49	0	37	9 57	6 12
Friday	8	252	6	25	6	48	0	36	10 57	5 49
Saturday	9	253	6	25	6	47	0	36	11 57	5 26
Sunday	10	254	6	26	6	47	0	36	12 57	5 4
Monday	11	255	6	26	6	46	0	35	13 57	4 41
Tuesday	12	256	6	26	6	45	0	35	14 57	4 18
Wednesday	13	257	6	26	6	44	0	34	15 57	3 55
Thursday	14	258	6	26	6	43	0	34	16 57	3 22
Friday	15	259	6	26	6	42	0	34	17 57	3 9
Saturday	16	260	6	27	6	41	0	33	18 57	2 46
Sunday	17	261	6	27	6	40	0	33	19 57	2 23
Monday	18	262	6	27	6	39	0	33	20 57	2 0
Tuesday	19	263	6	27	6	39	0	32	21 57	1 36
Wednesday	20	264	6	27	6	38	0	32	22 57	1 13
Thursday	21	265	6	27	6	37	0	32	23 57	0 50
Friday	22	266	6	28	6	36	0	31	24 57	0 26
Saturday	23	267	6	28	6	35	0	31	25 57	0 7
Sunday	24	268	6	28	6	34	0	31	26 57	0 30
Monday	25	269	6	28	6	33	0	30	27 57	0 44
Tuesday	26	270	6	28	6	33	0	30	28 57	1 7
Wednesday	27	271	6	28	6	32	0	30	29 57	1 31
Thursday	28	272	6	29	6	31	0	29	0 98	1 54
Friday	29	273	6	29	6	30	0	29	1 98	2 17
Saturday	30	274	6	29	6	29	0	29	2 98	2 41

# Phases of the Moon—OCTOBER 31 Days

☽ First Quarter 4th, 4h 30 5m P M  
 ○ Full Moon 11th 0h 31 1m P M  
 In Perigee 7th, 4 0h A M

☾ Last Quarter 19th, 6h 38 7m A M  
 ● New Moon 27th, 2h 7 0m A M  
 In Apogee 19th, 10 7h A M

C Day of the Week	Day of the Month	Day of the Year	Mean Time			Moon's Age at Noon	Sun's Declination at Mean Noon
			Sunrise A M	Sunset P M	True Noon		
			H M	H M	H M	D	S
Sunday	1	275	6 30	6 28	0 29	1 08	3 4
Monday	2	276	6 30	6 27	0 28	1 08	1 27
Tuesday	3	277	6 30	6 26	0 28	1 08	1 51
Wednesday	4	278	6 30	6 26	0 28	1 08	1 14
Thursday	5	279	6 30	6 25	0 27	1 08	1 37
Friday	6	280	6 31	6 24	0 27	1 08	1 0
Saturday	7	281	6 31	6 23	0 27	1 08	1 23
Sunday	8	282	6 31	6 22	0 27	1 08	1 46
Monday	9	283	6 31	6 21	0 26	1 08	6 9
Tuesday	10	284	6 31	6 20	0 26	1 08	6 32
Wednesday	11	285	6 32	6 19	0 26	1 08	6 55
Thursday	12	286	6 32	6 18	0 25	1 08	7 17
Friday	13	287	6 32	6 18	0 25	1 08	7 40
Saturday	14	288	6 33	6 17	0 25	1 08	8 2
Sunday	15	289	6 33	6 16	0 25	1 08	8 25
Monday	16	290	6 33	6 15	0 24	1 08	8 47
Tuesday	17	291	6 33	6 15	0 24	1 08	9 9
Wednesday	18	292	6 34	6 14	0 24	1 08	9 31
Thursday	19	293	6 34	6 13	0 24	1 08	9 53
Friday	20	294	6 34	6 13	0 24	1 08	10 7
Saturday	21	295	6 35	6 12	0 24	1 08	10 36
Sunday	22	296	6 35	6 11	0 24	1 08	10 57
Monday	23	297	6 35	6 11	0 23	1 08	11 18
Tuesday	24	298	6 35	6 10	0 23	1 08	11 39
Wednesday	25	299	6 36	6 10	0 23	1 08	12 0
Thursday	26	300	6 36	6 9	0 23	1 08	12 21
Friday	27	301	6 37	6 8	0 23	1 08	12 41
Saturday	28	302	6 37	6 8	0 23	1 44	13 2
Sunday	29	303	6 37	6 7	0 23	2 44	13 22
Monday	30	304	6 38	6 7	0 22	3 44	13 42
Tuesday	31	305	6 38	6 7	0 22	4 44	14 1

# Phases of the Moon—NOVEMBER 23 Days.

☾ First Quarter 2th, 11h 20 0m P.M.  
 ○ Full Moon 10th, 1h 48 0m A.M.  
 In Perigee 1st, 0 3h A.M.

☾ Last Quarter 18th, 3h 30 5m A.M.  
 ● New Moon 25th, 2h 20 4m P.M.  
 In Apogee 16th, 7 5h A.M.  
 In Perigee 28th, 1 2h A.M.

Day of the Week	Day of the Month	Day of the Year	Mean Time			Moon's Age at Noon	Sun's Declination at Mean Noon.
			Sunrise A.M.	Sunset P.M.	True Noon		
			H M	H M	H M P.M.	D	° S.
Wednesday	1	306	6 39	6 6	0 22	5 44	14 21
Thursday	2	307	6 39	6 6	0 22	6 44	14 40
Friday	3	308	6 40	6 5	0 22	7 44	14 59
Saturday	4	309	6 40	6 5	0 22	8 44	15 18
Sunday	5	310	6 41	6 4	0 22	9 44	15 36
Monday	6	311	6 41	6 4	0 22	10 44	15 54
Tuesday	7	312	6 42	6 3	0 22	11 44	16 12
Wednesday	8	313	6 42	6 3	0 23	12 44	16 30
Thursday	9	314	6 43	6 3	0 23	13 44	16 47
Friday	10	315	6 43	6 2	0 23	14 44	17 4
Saturday	11	316	6 44	6 2	0 23	15 44	17 21
Sunday	12	317	6 44	6 2	0 23	16 44	17 38
Monday	13	318	6 45	6 2	0 23	17 44	17 54
Tuesday	14	319	6 45	6 1	0 23	18 44	18 0
Wednesday	15	320	6 46	6 1	0 24	19 44	18 25
Thursday	16	321	6 47	6 1	0 24	20 44	18 41
Friday	17	322	6 47	6 1	0 24	21 44	18 55
Saturday	18	323	6 48	6 0	0 24	22 44	19 10
Sunday	19	324	6 48	6 0	0 24	23 44	19 24
Monday	20	325	6 49	6 0	0 24	24 44	19 38
Tuesday	21	326	6 49	6 0	0 25	25 44	19 52
Wednesday	22	327	6 50	6 0	0 25	26 44	20 5
Thursday	23	328	6 50	6 0	0 25	27 44	20 18
Friday	24	329	6 51	6 0	0 26	28 44	20 30
Saturday	25	330	6 51	6 0	0 26	29 44	20 41
Sunday	26	331	6 52	6 0	0 26	0 93	20 54
Monday	27	332	6 53	6 0	0 26	1 93	21 5
Tuesday	28	333	6 54	6 0	0 27	2 93	21 16
Wednesday	29	334	6 54	6 0	0 27	3 93	21 27
Thursday	30	335	6 55	6 0	0 27	4 93	21 37

# Phases of the Moon—DECEMBER 31 Days.

☽ First Quarter 2nd, 7h 25 5m A M  
 ○ Full Moon 9th, 6h 13 9m P M  
 In Apogee 14th 2 3h A M

☾ Last Quarter 17th, 11h 36 4m P M  
 ● New Moon 25th 2h 1 2m A M  
 ☽ First Quarter 31st 5h 37 2m P M  
 In Perigee 26th, 6 Ch A M

Day of the Week	Day of the Month	Day of the Year	Mean Time			Moon's Age at Noon	Sun's Declination at Mean Noon
			Sunrise, A M	Sunset P M	True Noon		
Friday	1	336	6 56	6 0	0 28	5 03	21 46
Saturday	2	337	6 56	6 1	0 28	6 03	21 56
Sunday	3	338	6 57	6 1	0 29	7 03	22 4
Monday	4	339	6 57	6 1	0 29	8 03	22 13
Tuesday	5	340	6 58	6 1	0 29	9 03	22 21
Wednesday	6	341	6 59	6 1	0 30	10 03	22 23
Thursday	7	342	6 59	6 1	0 30	11 03	22 30
Friday	8	343	7 0	6 2	0 31	12 03	22 42
Saturday	9	344	7 1	6 2	0 31	13 03	22 48
Sunday	10	345	7 1	6 2	0 32	14 03	22 54
Monday	11	346	7 2	6 3	0 32	15 03	22 59
Tuesday	12	347	7 2	6 3	0 32	16 03	23 4
Wednesday	13	348	7 3	6 3	0 33	17 03	23 9
Thursday	14	349	7 3	6 4	0 33	18 03	23 12
Friday	15	350	7 4	6 4	0 34	19 03	23 16
Saturday	16	351	7 5	6 4	0 34	20 03	23 19
Sunday	17	352	7 5	6 5	0 35	21 03	23 21
Monday	18	353	7 6	6 5	0 35	22 03	23 23
Tuesday	19	354	7 6	6 6	0 36	23 03	23 25
Wednesday	20	355	7 7	6 6	0 36	24 03	23 26
Thursday	21	356	7 7	6 7	0 37	25 03	23 27
Friday	22	357	7 8	6 7	0 37	26 03	23 27
Saturday	23	358	7 8	6 8	0 38	27 03	23 27
Sunday	24	359	7 9	6 8	0 38	28 03	23 26
Monday	25	360	7 9	6 9	0 39	0 45	23 25
Tuesday	26	361	7 10	6 9	0 39	1 45	23 23
Wednesday	27	362	7 10	6 10	0 40	2 45	23 21
Thursday	28	363	7 11	6 10	0 40	3 45	23 18
Friday	29	364	7 11	6 11	0 41	4 45	23 15
Saturday	30	365	7 11	6 12	0 41	5 45	23 12
Sunday	31	366	7 12	6 12	0 42	6 45	23 8

# CALENDAR FOR 1917.

## January.

S.	...	7	14	21	28	...
M.	...	8	15	22	29	...
Tu	...	2	9	16	23	30
W.	...	3	10	17	24	31
Th	...	4	11	18	25	...
F.	...	5	12	19	26	...
S.	...	6	13	20	27	...

## February

S.	...	4	11	18	25	...
M.	...	5	12	19	26	...
Tu	...	6	13	20	27	...
W.	...	7	14	21	28	...
Th	...	1	8	15	22	...
F.	...	2	9	16	23	...
S.	...	3	10	17	24	...

## March

S.	...	4	11	18	25	...
M.	...	5	12	19	26	...
Tu	...	6	13	20	27	...
W.	...	7	14	21	28	...
Th	...	1	8	15	22	29
F.	...	2	9	16	23	30
S.	...	3	10	17	24	31

## April

S.	...	1	8	15	22	29
M.	...	2	9	16	23	30
Tu	...	3	10	17	24	...
W.	...	4	11	18	25	...
Th	...	5	12	19	26	...
F.	...	6	13	20	27	...
S.	...	7	14	21	28	...

## May

S.	...	6	13	20	27	...
M.	...	7	14	21	28	...
Tu	...	1	8	15	22	29
W.	...	2	9	16	23	30
Th	...	3	10	17	24	31
F.	...	4	11	18	25	...
S.	...	5	12	19	26	...

## June

S.	...	3	10	17	24	...
M.	...	4	11	18	25	...
Tu	...	5	12	19	26	...
W.	...	6	13	20	27	...
Th	...	7	14	21	28	...
F.	...	1	8	15	22	29
S.	...	2	9	16	23	30

## July.

S.	...	1	8	15	22	29
M.	...	2	9	16	23	30
Tu	...	3	10	17	24	31
W.	...	4	11	18	25	...
Th	...	5	12	19	26	...
F.	...	6	13	20	27	...
S.	...	7	14	21	28	...

## August.

S.	...	5	12	19	26	...
M.	...	6	13	20	27	...
Tu	...	7	14	21	28	...
W.	...	1	8	15	22	29
Th	...	2	9	16	23	30
F.	...	3	10	17	24	31
S.	...	4	11	18	25	...

## September.

S.	...	2	9	16	23	30
M.	...	3	10	17	24	...
Tu	...	4	11	18	25	...
W.	...	5	12	19	26	...
Th	...	6	13	20	27	...
F.	...	7	14	21	28	...
S.	...	1	8	15	22	29

## October

S.	...	7	14	21	28	...
M.	...	1	8	15	22	29
Tu	...	2	9	16	23	30
W.	...	3	10	17	24	31
Th	...	4	11	18	25	...
F.	...	5	12	19	26	...
S.	...	6	13	20	27	...

## November

S.	...	4	11	18	25	...
M.	...	5	12	19	26	...
Tu	...	6	13	20	27	...
W.	...	7	14	21	28	...
Th	...	1	8	15	22	29
F.	...	2	9	16	23	30
S.	...	3	10	17	24	...

## December

S.	...	2	9	16	23	30
M.	...	3	10	17	24	31
Tu	...	4	11	18	25	...
W.	...	5	12	19	26	...
Th	...	6	13	20	27	...
F.	...	7	14	21	28	...
S.	...	1	8	15	22	29



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1

The war has come home to India in no appreciable degree. Over two hundred thousand troops have been sent to the various theatres of the struggle. The cream of British manhood in the country has been embodied in the Reserve of Officers. A perpetual stream of reinforcements has passed through the various principal camps at Bombay and Karachi, a counter-stream of wounded and sick has returned from the front. But India is in some respects a military State. The Army in peace time occupies a much more important place in the work of the administration than it does in the United Kingdom. Consequently the amount of improvisation has been much smaller, the existing machinery has been easily expanded to meet war needs undreamt of. The disturbance in the social life of the community has been slight. Trade has been good. The rise in the prices of the principal commodities has been small. Money has been plentiful and reasonably cheap. Bankers have complained of a plethora of funds. Not once has the mail steamer failed to bring its weekly budget of news, nor once has the cable either broken down or been interrupted. Then the fortunes of the land have been in the ascendant. The first year of the war witnessed one of the most bounteous harvests in recent history, and India is an agricultural country. It is still dependent upon the crops. There were many anxious months in 1915 when the erratic character of the monsoon seemed to promise acute scarcity in certain areas in the West and famine in parts of the Punjab. Late rains of almost unprecedented volume, however, saved the situation; the harvest will be good over the greater part of India, and scarcity will be confined to small areas.

3

When however these symptoms appear, we have to consider the size of India and the nature of its government. India is no single homogenous country, it is a continent occupied by people wide as the Indian Ocean. It comprises three hundred and fifteen millions of people, a growing proportion of them are educated in English and imbued with the ideas reflected in English literature. It is inevitable that in such circumstances the seeds of political growth we have im- planted should desire to flourish. It was well said by an Indian administrator that it is only a matter of time and how much time it takes before the matter for surprise is that they do not take so few.

[illegible]

# The History of India in Outline.

No history of India can be proportionate, and the briefest summary must suffer from the same defect. Even a wholesale acceptance as history of mythology, tradition, and folklore will not make good, though it makes picturesque, the many gaps that exist in the early history of India and, though the labours of modern geographers and archaeologists have been amazingly fruitful, it cannot be expected that these gaps will ever be filled to any appreciable extent. Approximate accuracy in chronology and an outline of dynastic facts are all that the student can look for up to the time of Alexander, though the briefest excursion into the by-ways of history will reveal to him many alluring and mysterious fields for speculation. There are, for example, to this day castles that believe they sprang originally from the loins of a being who landed "from an impossible boat on the shores of a highly improbable sea", and the great epic poems contain plentiful statements equally difficult of reconciliation with modern notions of history as a science. But from the Jataka stories and the Puranas, much valuable information is to be obtained, and, for the benefit of those unable to go to these and other original sources, it has been distilled by a number of writers.

The orthodox Hindu begins the political history of India more than 3000 years before Christ, with the war waged on the banks of the Jumna between the sons of Kuru and the sons of Pandu, but the modern critic prefers to omit several of those remote centuries and to take 600 B. C., or thereabouts, as his starting point. At that time much of the country was covered with forest, but the Aryan races, who had entered India from the north, had established in parts a form of civilization far superior to that of the aboriginal savages, and to this day there survive cities, like Benares founded by those invaders. In like manner the Dravidian invaders from an unknown land, who overran the Deccan and the Southern part of the Peninsula, crushed the aborigines, and, at a much later period, were themselves subdued by the Aryans. Of these two civilizing forces, the Aryan is the better known, and of the Aryan kingdoms the first of which there is authentic record is that of Magadha, or Bihar, on the Ganges. It was in, or near, this powerful kingdom that Jainism and Buddhism had their origin, and the fifth King of Magadha, Bimbisara by name, was the friend and patron of Gautama Buddha. The King mentioned was a contemporary of Darius, autocrat of Persia (521 to 485 B. C.) who annexed the Indus valley and formed from his conquest an Indian satrapy which paid as tribute the equivalent of about one million sterling. Detailed history, however, does not become possible until the invasion of Alexander in 326 B. C.

## Alexander the Great.

That great soldier had crossed the Hindu Kush in the previous year and had captured Aornos, on the Upper Indus. In the spring of 326 he crossed the river at Ohind, received the submission of the King of Taxila, and marched against Porus who ruled the fertile country between the rivers Hydaspes (Jhelum) and

Akesines (Chenab). The Macedonian carried all before him, defeating Porus at the battle of the Hydaspes, and crossing the Chenab and Ravi. But at the River Hyphasis (Bias) his weary troops mutinied, and Alexander was forced to turn back and retire to the Jhelum where a fleet to sail down the rivers to the sea was nearly ready. The wonderful story of Alexander's march through Media and Persia to Babylon, and of the voyage of Nearchus up the Persian Gulf is the climax to the narrative of the invasion but is not part of the history of India. Alexander had stayed nineteen months in India and left behind him officers to carry on the Government of the kingdoms he had conquered, but his death at Babylon, in 323, destroyed the fruits of what has to be regarded as nothing but a brilliant raid, and within two years his successors were obliged to leave the Indian provinces, heavily scarred by war but not hell-razed.

The leader of the revolt against Alexander's generals was a young Hindu, Chandragupta, who was an illegitimate member of the Royal Family of Magadha. He deposed the ruler of that kingdom and became so powerful that he is said to have been able to place 600,000 troops in the field against Seleucus, to whom Babylon had passed on the death of Alexander. This was too formidable an opposition to be faced, and a treaty of peace was concluded between the Syrian and Indian monarchs which left the latter the first paramount Sovereign of India (321 B. C.) with his capital at Patalliputra, the modern Patna and Benares. Of Chandragupta's court and administration a very full account is preserved in the fragments that remain of the history compiled by Megasthenes, the ambassador sent to India by Seleucus. His memorable reign ended in 297 B. C. when he was succeeded by his son Bindusara, who in his turn was succeeded by Asoka (269—231 B. C.) who recorded the events of his reign in numerous inscriptions. This king, in an unusually bloody war, added to his dominions the kingdom of Kalinga (the Northern Orissa) and then becoming a convert to Buddhism, resolved for the future to abstain from conquest by force of arms. The consequences of the conversion of Asoka were amazing. He was not intolerant of other religions, and did not endeavour to force his creed on his "children". But he initiated measures for the propagation of his doctrine with the result that "Buddhism, which had hitherto been a merely local sect in the valley of the Ganges, was transformed into one of the greatest religions of the world—the greatest, probably, if measured by the number of adherents. This is Asoka's claim to be remembered, this it is which makes his reign an epoch, not only in the history of India, but in that of the world." The wording of his edicts reveal him as a great king as well as a great missionary, and it is to be hoped that the excavations now being carried on in the ruins of his palace may throw yet more light on his character and times. On his death the Maurya kingdom fell to pieces. Even during his reign there had been signs of new forces at work on the borderland of India, where the inde-



1163 one of them could boast that he had conquered all the country from the Vindhya to the Himalayas including Delhi already a fortress a hundred years old. The son of this conqueror was Prithwi Raj, the champion of the Hindus against the Mahomedans. With his death in battle (1192) ends the golden age of the new civilization that had been evolved out of chaos, and of the greatness of that age there is a splendid memorial in the temples and forts of the Rajput states and in the two great philosophical systems of Sankaracharya (ninth century) and Ramanuja (twelfth century). The triumph of Hinduism had been achieved, it must be added, at the expense of Buddhism, which survived only in Magadha at the time of the Mahomedan conquest and speedily disappeared there before the new faith.

### Mahomedan India

The wave of Mahomedan invaders that eventually swept over the country first touched India, in Sind, less than a hundred years after the death of the Prophet in 632. But the first real contact was in the tenth century when a Turkish slave of a Persian ruler founded a kingdom at Ghazni, between Kabul and Kandahar. A descendant of his, Mahmud (967-1030) made repeated raids into the heart of India, capturing places so far apart as Multan, Kanauj, Gwalior, and Somnath in Kathlawar, but permanently occupying only a part of the Punjab. Enduring Mahomedan rule was not established until the end of the twelfth century, by which time, from the little territory of Ghor, there had arisen one Mahomed Ghorî capable of carving out a kingdom stretching from Peshawar to the Bay of Bengal. Prithwi Raj, the Chauhan ruler of Delhi and Ajmer, made a brave stand against, and once defeated, one of the armies of this ruler, but was himself defeated in the following year. Mahomed Ghorî was murdered at Lahore (1206) and his vast kingdom, which had been governed by satraps, was split up into what were practically independent sovereignties. Of these satraps, Qutb-ud-din, the slave ruler of Delhi and Lahore, was the most famous, and is remembered by the great mosque he built near the modern Delhi. Between his rule and that of the Mughals, which began in 1526, only a few of the many Kings who governed and fought and built beautiful buildings, stand out with distinction. One of these was Ala-ud-din (1296-1316), whose many expeditions to the south much weakened the Hindu Kings, and who proved himself to be a capable administrator. Another was Firoz Shah, of the house of Tughlaq, whose administration was in many respects admirable, but which ended, on his abdication, in confusion. In the reign of his successor, Mahmud (1398-1413), the kingdom of Delhi went to pieces and India was for seven months at the mercy of the Turkish conqueror Taimur. It was the end of the fifteenth century before the kingdom, under Sikandar Lodi, began to recover. His son Ibrahim, still further extended the kingdom that had been recreated, but was defeated by Babar, King of Kabul, at Panipat, near Delhi, in 1526, and there was then established in India the Mughal dynasty.

The Mahomedan dynasties that had ruled in capitals other than Delhi up to this date

were of comparative unimportance though some great men appeared among them. In Gujarat, for example, Ahmad Shah, the founder of Ahmednagar, showed himself a good ruler and builder as well as a good soldier, though his grandson, Mahmud Shah Begara, was a greater ruler—acquiring fame at sea as well as on land. In the South various lines of the Bahmani dynasty made names for themselves, especially in the long wars they waged on the new Hindu kingdom that had arisen which had its capital at Vijayanagar. Of importance also was Adil Khan, a Turk, who founded (1496) the Bijapur dynasty of Adil Shahis. It was one of his successors who crushed the Vijayanagar dynasty, and built the great mosque for which Bijapur is famous.

### The Mughal Empire

As one draws near to modern times it becomes impossible to present anything like a coherent and consecutive account of the growth of India as a whole. Detached threads in the story have to be picked up one by one and followed to their ending, and although the sixteenth century saw the first European settlements in India, it will be convenient here to continue the narrative of Mahomedan India almost to the end of the Mughal Empire. How Babar gained Delhi has already been told. His son, Humayun, greatly extended his kingdom but was eventually defeated (1540) and driven into exile by Sher Khan, an Afghan of great capabilities, whose short reign ended in 1545. The Sur dynasty thus founded by Sher Khan lasted another ten years when Humayun, having snatched Kabul from one of his brothers, was strong enough to win back part of his old kingdom. When Humayun died (1556) his eldest son, Akbar, was only 13 years old and was confronted by many rivals. Nor was Akbar well served, but his career of conquest was almost uninterrupted and by 1591 the whole of India North of the Nerbudda had bowed to his authority, and he subsequently entered the Deccan and captured Ahmednagar. This great ruler, who was as remarkable for his religious tolerance as for his military prowess, died in 1605, leaving behind him a record that has been surpassed by few. His son, Jehangir, who married the Persian lady Nur Jahan, ruled until 1627, bequeathing to an admiring posterity some notable buildings—the tomb of his father at Sikandra, part of the palace at Agra, and the palace and fortress of Lahore. His son, Shahjahan, was for many years occupied with wars in the Deccan, but found time to make his court of incredible magnificence and to build the most famous and beautiful of all tombs, the Taj Mahal, as well as the fort, palace and Juma Masjid at Delhi. The quarrels of his sons led to the deposition of Shahjahan by one of them, Aurangzeb, in 1658. This Emperor's rule was one of constant intrigue and fighting in every direction, the most important of his wars being a twenty-five years' struggle against the Marathas of the Deccan who, under the leadership of Sivaji, became a very powerful faction in Indian politics. His bigoted attitude towards Hinduism made Aurangzeb all the more anxious to establish his Empire on a firm basis in the south, but he was unable to hold his many conquests, and on his death (1707) the





strong position in Southern India, which had become independent of Delhi and was divided into three large States—Hyderabad, Tanjore, and Mysore—and a number of petty states under local chieftains. In the affairs of these States Dupleix, when Governor of Pondicherry, had intervened with success, and when Madras was captured by a French squadron, under La Bourdonnais (1746) Dupleix wished to hand it over to the Nawab of Arcot—a deputy of the Nizam's who ruled in the Carnatic. The French, however, kept Madras, repelling an attack by the dis-appointed Nawab as well as the British attempts to recapture it. The treaty of Aix-la-Chapelle restored Madras to the English. The fighting had shown the Indian powers the value of European troops and this was again shown in the next French war (1750-54) when Clive achieved enduring fame by his capture and subsequent defence of Arcot. This war arose from Dupleix supporting candidates for the disputed successions at Arcot and Hyderabad while the English at Madras put forward their own nominees. One of Dupleix's officers, the Marquis de Bussy, persuaded the Nizam to take into his pay the army which had established his power, and in return the Northern Circars, between Orisa and Madras, was granted to the French. This territory, however, was captured by the English in the seven years' war (1756-63). Dupleix had by then been recalled to France. Lally, who had been sent to drive the English out of India, captured Fort St. David and invested Madras. But the victory which Colonel (Sir Eyre) Coote won at Wandiwash (1760) and the surrender of Pondicherry and Gingee put an end to the French ambitions of Empire in Southern India. Pondicherry passed more than once from the one nation to the other before settling down to its present existence as a French colony in miniature.

### Battle of Plassey

While the English were fighting the third French war in the South they became involved in grave difficulties in Bengal, where Siraj-ud-Daula had acceded to power. The headquarters of the English at Calcutta were threatened by that ruler who demanded they should surrender a refugee and should cease building fortifications. They refused and he marched against them with a large army. Some of the English took to their ships and made off down the river, the rest surrendered and were cast into the jail known as the "Black Hole." From this small and stifling room 23 persons, out of 146, came out alive the next day. Clive who was at Madras, immediately sailed for Calcutta with Admiral Watson's squadron, recaptured the town (1757), and, as war with the French had been proclaimed, proceeded to take Chandernagore. The Nawab Siraj-ud-Daula then took the side of the French, and Clive, putting forward Mir Jafar as candidate for the Nawab's throne, marched out with an army consisting of 900 Europeans, 2,000 sepoys and 8 pieces of artillery against the Nawab's host of over 50,000. The result was the historic battle of Plassey (June 23) in which Clive, after hesitating on the course to be pursued, routed the Nawab. Mir Jafar was put on the throne

at Murshidabad, and the price of this honour was put at £2,310,000 in addition to the grant to the Company of the land round Calcutta now known as the District of the twenty-four Parganas. In the year after Plassey, Clive was appointed Governor of Bengal and in that capacity sent troops against the French in Madras and in person led a force against the Oudh army that was threatening Mir Jafar in each case with success. From 1760 to 1765 Clive was in England. During his absence the Council at Calcutta deposed Mir Jafar and for a price put Mir Kasim in his place. This ruler moved his capital to Mongher, organized an army, and began to intrigue with the Nawab Wazir of Oudh. He soon found, in a dispute over customs dues, an opportunity of quarrelling with the English and the first shots fired by his followers were the signal for a general rising in Bengal. About 200 Englishmen and a number of sepoys were massacred, but his trained regiments were defeated at Ghoria and Oodeganallah and Mir Kasim sought protection from the Nawab of Oudh. But in 1764, after quelling a sepoy mutiny in his own camp by blowing 24 ring-leaders from the guns, Major (Sir Hector) Munro defeated the joint forces of Shah Alam, the Mughal Emperor, and the Nawab of Oudh in the battle of Buxar. In 1765 Clive (now Baron Clive of Plassey) returned as Governor. "Two landmarks stand out in his policy. First, he sought the substance, although not the name, of territorial power, under the fiction of a grant from the Mughal Emperor. Second, he desired to purify the Company's service, by prohibiting illicit gains, and by guaranteeing a reasonable pay from honest sources. In neither respect were his plans carried out by his immediate successors. But our efforts towards a sound administration date from this second Governorship of Clive, as our military supremacy dates from his victory at Plassey." Before Clive left India, in 1767, he had readjusted the divisions of Northern India and had set up a system of Government in Bengal by which the English received the revenues and maintained the army while the criminal jurisdiction was vested in the Nawab. The performance of his second task, the purification of the Company's service, was hotly opposed but carried out. He died in 1774 by his own hand, the House of Commons having in the previous year censured him, though admitting that he did render "great and meritorious services to his country."

### Warren Hastings

The dual system of government that Clive had set up proved a failure and Warren Hastings was appointed Governor, in 1772 to carry out the reforms settled by the Court of Directors which were to give them the entire care and administration of the revenues. Thus Hastings had to undertake the administrative organization of India, and, in spite of the factious attitude of Philip Francis, with whom he fought a duel and of other members of his Council, he reorganized the civil service, reformed the system of revenue collection, greatly improved the financial position of the Company, and created courts of justice and some semblance of a police force. From 1772 to 1774 he was Governor of Bengal, and from 1774 to 1775

he was the first Governor-General, nominated under an Act of Parliament passed in the previous year. His financial reforms, and the forced contributions he enacted from the rebellious Chet Singh and the Begum of Oudh, were interpreted in England as acts of oppression and formed, together with his action in the trial of Nuncomar for forgery, the basis of his seven years' trial before the House of Lords, which ended in a verdict of not guilty on all the charges. But there is much more for which his administration is justly famous. The recovery of the Marathas from their defeat at Panipat was the cardinal factor that influenced his policy towards the native states. One frontier was closed against Maratha invasion by the loan of a British brigade to the Nawab Vazir of Oudh, for his war against the Rohillas who were intriguing with the Marathas. In Western India he found himself committed to the two Maratha wars (1775-82) owing to the ambition of the Bombay Government to place its own nominee on the throne of the Peshwa at Poona, and the Bengal troops that he sent over made amends, by the conquest of Gujrat and the capture of Gwalior, for the disgrace of Wadgaon where the Marathas overpowered a Bombay army. In the South—where interference from Madras had already led (1769) to what is known as the first Mysore war, a disastrous campaign against Hyder Ali and the Nizam—he found the Madras Government again in conflict with those two potentates. The Nizam he won over by diplomacy, but against Hyder Ali he had to despatch a Bengal army under Sir Eyre Coote. Hyder Ali died in 1782 and two years later a treaty was made with his son Tipu. It was in these acts of intervention in distant provinces that Hastings showed to best advantage as a great and courageous man, cautious, but swift in action when required. He was succeeded, after an interregnum, by Lord Cornwallis (1788-93) who built on the foundations of civil administration laid by Hastings, by entrusting criminal jurisdiction to Europeans and establishing an Appellate Court of Criminal Judicature at Calcutta. In the Civil Service he separated the functions of the District Collector and Judge and organized the "writers" and "merchants" of the Company into an administrative Civil Service. This system was subsequently extended to Madras and Bombay. Lord Cornwallis is better known for his introduction, on orders from England, of the Permanent Settlement in Bengal. (See article on Land Revenue). A third Mysore war was waged during his tenure of office which ended in the submission of Tipu Sultan. Sir John Shore (Lord Teignmouth), an experienced Civil Servant, succeeded Lord Cornwallis, and, in 1798, was followed by Lord Wellesley, the friend of Pitt, whose projects were to change the map of India.

#### Lord Wellesley's Policy

The French in general, and "the Corsican" in particular, were the enemy most to be dreaded. For a few years before Lord Wellesley took up his duties in India, and he formed the scheme of definitively ending French schemes in Asia by placing himself at the head of a great Indian confederacy. He started by obtaining from the Nawab of Oudh the cession of

large tracts of territory in lieu of payments overdue as subsidies for British troops, he then won over the Nizam to the British side, and, after exposing the intrigues of Tipu Sultan with the French, embarked on the fourth Mysore war which ended (1799) in the fall of Seringapatam and the gallant death of Tipu. Part of Mysore, the Carnatic, and Tanjore roughly constituting the Madras Presidency of to-day then passed to British rule. The five Maratha powers—the Peshwa of Poona, the Gaekwar of Baroda, Sindhia of Gwalior, Holkar of Indore and the Raja of Nagpur—had still to be brought into the British net. The Peshwa, after being defeated by Holkar, fled to British territory and signed the Treaty of Bassain which led to the third Maratha war (1802-04) as it was regarded by Sindhia and the Raja of Nagpur as a betrayal of Maratha independence. In this, the most successful of British campaigns in India, Sir Arthur Wellesley (the Duke of Wellington) and General (Lord) Lake carried all before them, the one by his victories at Assaye and Argaum and the other at Aligarh and Laswari. Later operations, such as Colonel Monson's retreat through Central India, were less fortunate. The great acquisitions of territory made under Lord Wellesley proved so expensive that the Court of Directors, becoming impatient, sent out Lord Cornwallis a second time to make peace at any price. He, however, did soon after his arrival in India, and Sir George Barlow carried on the government (1805-7) until the arrival of a stronger ruler, Lord Minto. He managed to keep the peace in India for six years, and to add to British dominions by the conquest of Java and Mauritius. His foreign policy was marked by another new departure, inasmuch as he opened relations with the Punjab, Persia, and Afghanistan, and concluded a treaty with Ranjit Singh, at Lahore, which made that Sikh ruler the loyal ally of the British for life.

The successor of Lord Minto was Lord Moira, who found himself obliged almost at once to declare war on the Gurkhas of Nepal, who had been encroaching on British territory. After initial reverses, the English, under General Ochterlony, were successful and the Treaty of Sagauli (1816) was drawn up which defines British relations with Nepal to the present day. For this success Lord Moira was made Marquis of Hastings. In the same year he made preparations for the last Maratha war (1817-18) which was made necessary by the lawless conduct of the Pindaris, gangs of Pathan or Rohilla origin, whose chief patrons were the rulers of Native States. The large number of 120,000 that he collected for this purpose destroyed the Pindaris, annexed the dominions of the rebellious Peshwa of Poona, protected the Rajput States, made Sindhia enter upon a new treaty, and compelled Holkar to give up part of his territory. Thus Lord Hastings established the British power more firmly than ever, and when he resigned, in 1823, all the Native States outside the Punjab had become parts of the political system and British interests were permanently secured from the Persian Gulf to Singapore. Lord Amherst followed Lord Hastings, and his five years' rule (1823-28) are memorable for the first Burmese war and the capture of Bharatpur. The former opera-

tion was undertaken owing to the insolent demands and raids of the Burmese, and resulted in the Burmese ceding Assam, Arakan, and the coast of Malacca and their claims to the lower provinces. The capture of Bharatpur by Lord Combermere (1826) wiped out the rump which General Lake had received there twenty years earlier. A disputed succession on this occasion led to the British intervention.

### Social Reform

A former Governor of Madras, Lord William Bentinck, was the next Governor-General. His epitaph by Macaulay, says "He abolished cruel rites, he effaced humiliating distinctions, he gave liberty to the expression of public opinion." His constant study was to elevate the intellectual and moral character of the nations committed to his charge.

Some of his financial reforms, forced on him from England, and his widening of the gates by which educated Indians could enter the service of the Company, were most unpopular at the time, but were eclipsed by the acts he took for the abolition of *Sati*, or widow burning, and the suppression—with the help of Captain Sleeman—of the professional hereditary assassins known as *Thugs*. In 1832 he annexed Cachar, and, two years later, Coorg. The incompetence of the ruler of Mysore forced him to take that State also under British administration—where it remained until 1881. His rule was marked in other ways by the despatch of the first steamship that made the passage from Bombay to Suez, and by his settlement of the long educational controversy in favour of the advocates of instruction in English and the vernaculars. Lord William Bentinck left India (1835) with his programme of reforms unfinished. The new Charter Act of 1833 had brought to a close the commercial business of the Company and emphasized their position as rulers of an Indian Empire in trust for the Crown. By it the whole administration, as well as the legislation of the country, was placed in the hands of the Governor-General in Council, and authority was given to create a Presidency of Agra. Before his retirement Bentinck assumed the statutory title of Governor-General of India (1834), thus marking the progress of consolidation since Warren Hastings in 1774 became the first Governor-General of Fort William. Sir Charles Metcalfe, being senior member of Council, succeeded Lord William Bentinck, and during his short tenure of office carried into execution his predecessor's measure for giving entire liberty to the press.

### Afghan Wars

With the appointment of Lord Auckland as Governor-General (1836-42) there began a new era of war and conquest. Before leaving London he announced that he looked with exultation to the prospect of "promoting education and knowledge, and of extending the blessings of good Government and happiness to millions in India" but his administration was almost exclusively comprised in a fatal expedition to Afghanistan, which dragged in its train the annexation of Sind, the Sikh wars, and the inclusion of Baluchistan in the protectorate of India. The first Afghan war was undertaken partly to counter the Russian advance

in Central Asia and partly to place on the throne at Kabul the dethroned ruler Shah Shuja in place of Dost Mahomed. The latter object was easily attained (1839) and for two years Afghanistan remained in the military occupation of the British. In 1841 Sir Alexander Burnes was assassinated in Kabul and Sir William Macnaghten suffered the same fate in an interview with the son of Dost Mahomed. The British commander in Kabul, Gen. Elphinstone, was old and feeble, and after two months' delay he led his army of 1,500 and 12,000 camp followers back towards India in the depth of winter. Between Kabul and Jallalabad the whole force perished either at the hands of the Afghans or from cold, and Dr. Brydon was the only survivor who reached the latter city. Lord Ellenborough succeeded Lord Auckland and was persuaded to send an army of 10,000 men to relieve Jallalabad. One force under Gen. Pollock relieved Jallalabad and marched on Kabul, while Gen. Nott, advancing from Kandahar, captured Ghazni and joined Pollock at Kabul (1842). The bazaar at Kabul was blown up, the prisoners released, and the army returned to India leaving Dost Mahomed to take undisputed possession of his throne. The drama ended with a bombastic proclamation from Lord Ellenborough and the parade through the Punjab of the (spurious) gates of Somnath taken from the tomb of Mahmud of Ghazni.

### Sikh Wars

Lord Ellenborough's other wars—the conquest of Sind by Sir Charles Napier and the suppression of an outbreak in Gwalior—were followed by his recall and the appointment of Sir Henry (1st Lord) Hardinge to be Governor-General. A soldier Governor-General was not unacceptable, for it was felt that a trial of strength was imminent between the British and the remaining Hindu power in India, the Sikhs. Ranjit Singh, the founder of the Sikh Kingdom, had died in 1839, leaving to the end of the treaty he had made with Metcalfe thirty years earlier. He left no son capable of ruling, and the *Khalsa*, or central council of the Sikh army, was burning to measure its strength with the British sepoys. The intrigues of two men, Lal Singh and Tej Singh, to obtain the supreme power led to their crossing the Sutlej and invading British territory. Sir Hugh Gough, the Commander-in-Chief, and the Governor-General hurried to the frontier, and within three weeks four pitched battles were fought—at Mudki, Ferozeshah, Aliwal and Sohraon. The Sikhs were driven across the Sutlej and Lahore surrendered to the British, but the province was not annexed. By the terms of peace the infant Duleep Singh was recognized as Rajah, Major Henry Lawrence was appointed Resident, to assist the Sikh Council of Regency, at Lahore, the Jullundur Doab was added to British territory, the Sikh army was limited, and a British force was sent to garrison the Punjab on behalf of the child Rajah. Lord Hardinge returned to England (1848) and was succeeded by Lord Dalhousie, the greatest of Indian proconsuls.

Dalhousie had only been in India a few months when the second Sikh war broke out. In the attack on the Sikh position at Chillianwala the British lost 2,400 officers and men.

besides four guns and the colours of three regiments but before reinforcements could arrive from England, bringing Sir Charles Napier as Commander-in-Chief, Lord Gough had restored his reputation by the victory of Gujrat which absolutely destroyed the Sikh army. As a consequence the Punjab was annexed and became a British province (1849), its pacification being so well carried out, under the two Lawrences that on the out-break of the Mutiny eight years later it remained not only quiet but loyal. In 1852 Lord Dalhousie had again to embark on war, this time in Burma, owing to the ill-treatment of British merchants in Rangoon. The lower valley of the Irawaddy was occupied from Rangoon to Prome and annexed, under the name of Pegu, to those provinces that had been acquired in the first Burmese war. British territories were enlarged in many other directions during Lord Dalhousie's tenure of office. His "doctrine of lapse" by which British rule was substituted for Indian States where continued misrule or the failure of a dynasty made this change possible, came into practice in the cases of Satara, Jhansi, and Nagpur (which last-named State became the Central Provinces) where the rulers died without leaving male heirs. Oudh was annexed on account of its misrule. Dalhousie left many other marks on India. He reformed the administration from top to bottom, founded the Public Works Department, initiated the railways, telegraphs and postal system, and completed the great Ganges canal. He also detached the Government of Bengal from the charge of the Governor-General, and summoned representatives of the local Governments to the deliberations of the Government of India. Finally, in education he laid down the lines of a department of public instruction and initiated more practical measures than those devised by his predecessors. It was his misfortune that the mutiny, which so swiftly followed his resignation, was by many critics in England attributed to his passion for change.

### The Sepoy Mutiny

Dalhousie was succeeded by Lord Canning in 1856, and in the following year the sepoys of the Bengal army mutinied and all the valley of the Ganges from Delhi to Patna rose in rebellion. The causes of this convulsion are difficult to estimate, but are probably to be found in the unrest which followed the progress of English civilisation, in the spreading of false rumours that the whole of India was to be subdued, in the confidence the sepoy troops had acquired in themselves under British leadership, and in the ambition of the educated classes to take a greater share in the government of the country. Added to this, there was in the deposed King of Delhi Bahadur Shah, a centre of growing disaffection. Finally there was the story—not devoid of truth—that the cartridges for the new Enfield rifle were greased with fat that rendered them unclean for both Hindus and Mahomedans. And when the mutiny did break out it found the Army without many of its best officers, who were employed in civil work, and the British troops reduced, in spite of Lord Dalhousie's warnings, below the number he considered essential for safety. On May 10

the sepoys at Meerut rose in mutiny, cut down a few Europeans, and, unchecked by the large European garrison, went off to Delhi where next morning the Mahomedans rose. From that centre the mutiny spread through the North-Western Provinces and Oudh into Lower Bengal. Risings in the Punjab were put down by Sir John Lawrence and his subordinates, who armed the Sikhs, and with their help reduced the sepoys, and Lawrence was subsequently able to send a strong body of Sikhs to aid in the siege of Delhi. The native armies of Madras and Bombay remained for the most part true to their colours. In Central India, the contingents of some of the great chiefs joined the rebels, but Hyderabad was kept loyal by the influence of its minister, Sir Salar Jung.

The interest of the war centres round Delhi, Cawnpore and Lucknow, though in other places massacres and fighting occurred. The siege of Delhi began on June 8 when Sir Henry Barnard occupied the Ridge outside the town. Barnard died of cholera early in July, and Thomas Reed, who took his place, was obliged through illness to hand over the command to Archdale Wilson. In August Nicholson arrived with a reinforcement from the Punjab. In the meantime the rebel force in Delhi was constantly added to by the arrival of new bodies of mutineers, attacks were frequent and the losses heavy. Cholera and sunstroke carried off many victims on the Ridge, and when the final assault was made in September the Delhi army could only parade 4,720 infantry, of whom 1,860 were Europeans. The arrival of siege guns made it possible to advance the batteries on September 8, and by the 13th a breach was made. On the following day three columns were led to the assault, a foul day. Over the ruins of the Home and Salkeld Co. Nicholson formed up. By nightfall the Brit 1,200 killed and won foothold in the city followed and Delhi followed and Nicholson was killed. Bahadur Shah's two sons were shot by Captain Hodson.

### Massacre at Cawnpore

At Cawnpore the sepoys mutinied on June 27 and found in Nana Sahib, the heir of the last Peshwa, a willing leader in spite of his former professions of loyalty. There a European force of 240 with six guns had to protect 570 non-combatants, and held out for 22 days, surrendering only on the guarantee of the Nana that they should have a safe conduct as far as Allahabad. They were embarked on 10 boats on the Ganges when fire was opened on them, the men being shot or forced to swim before the eyes of their wives and children, and the women being mutilated and thrown into the Ganges. At Cawnpore to which place they were taken, their bodies were thrown down a well before Havelock, having defeated the rebels, arrived to take the place. In the small garrison held out at Lucknow from July 2 to September 2, the British were added and ordered the place to be retaken. The place was taken under the command of Sir Havelock, and the rebels were killed.

not finally delivered until Sir Colin Campbell arrived in November. Fighting continued for 18 months in Oudh which Sir Colin Campbell finally reduced, and in Central India, where Sir Hugh Rose waged a brilliant campaign against the disinherited Rani of Jhansi—who died at the head of her troops—and Tantia Topi.

### Transfer to the Crown

With the end of the mutiny there began a new era in India, strikingly marked at the outset by the Act for the Better Government of India (1858) which transferred the entire administration from the Company to the Crown. By that Act India was to be governed by and in the name of, the Sovereign through a Secretary of State assisted by a Council of six members. At the same time the Governor-General received the title of Viceroy. The European troops of the Company, numbering about 24,000 officers and men were greatly representing the transfer—amalgamated with the Royal service, and the Indian Navy was abolished. On November 1, 1858, the Viceroy announced in Durbar at Allahabad that Queen Victoria had assumed the government of India and proclaimed a policy of justice and religious-toleration. A principle already enunciated in the Charter Act of 1833 was reinforced, and all, of every race or creed, were to be admitted as far as possible to those offices in the Queen's service for which they might be qualified. The aim of the Government was to be the benefit of all her subjects in India—"In their prosperity will be our strength in their contentment our security, and in their gratitude our best reward." Peace was proclaimed in July 1859, and in the cold weather Lord Canning went on tour in the northern provinces to receive the homage of loyal chiefs and to assure them that the "policy of lapse" was at an end. A number of other important reforms marked the closing years of Canning's Viceroyalty. The India Councils Act (1861) augmented the Governor-General's Council, and the Councils of Madras and Bombay by adding non-official members, European and Indian, for legislative purposes only. By another Act of the same year High Courts of Judicature were constituted. To deal with the increased debt of India, Mr James Wilson was sent from England to be Financial Member of Council, and to him are due the customs system, income tax, license duty and State paper currency. The cares of office had broken down the Viceroy's health. Lady Canning died in 1862 and this hastened his departure for England where he died in June of that year. His successor, Lord Elgin, lived only a few months after his arrival in India, and was succeeded by Sir John (afterwards Lord) Lawrence, the "saviour of the Punjab."

### Sir John Lawrence

The chief task that fell to Sir John Lawrence was that of reorganising the Indian military system, and of reconstructing the Indian army. The latter task was carried out on the principle that in the Bengal army the proportion of Europeans to Indians in the infantry and cavalry should be one to two, and in the Madras and Bombay armies one to three; the artillery was to be almost wholly European.

The re-organisation was carried out in spite of financial difficulties and the reduction of Indian revenues with the cost of new war in Afghanistan with which India had no direct connection, but operations in Afghanistan were all the drain made on the army in India while the re-organising process was being carried out. In 1859-60 famines in Orissa (1860) and Punjab (1861) and Upper Hindustan (1859) caused a fall in Sir John Lawrence's popularity, and he laid down the principle for the future in Indian history that the officer of the Government would be held responsible for the failure of taking every possible measure to avert such a calamity. The also created the institution of permanent under-secretaries for the various administrative departments to be held in office. On 15th July 1861 the Viceroy in Bengal. The other was the recognition of the wild scramble for the office of Viceroy that took place in 1862-63 during the years of prosperity for the Indian cotton industry caused by the American Civil War. The "Share Manifesto" of 1863 did no permanent harm to the trade of Bombay, but was on the other hand far more painful for the work of splendid building in Bombay that city during the Governorship of Sir Philip Frederick. Sir John Lawrence retired in 1869 having passed through every grade of the service from Assistant Secretary to the Viceroyalty. Lord Mayo, who succeeded him, created an Agricultural Department and introduced the system of Provincial Councils, thus giving the impulse to local government. He also laid the foundation for the reform of the salt duties thereby enabling his successors to abolish the inter-provincial customs duties. Unhappily his career came to an end for the development of the country by extending communications of every kind were not carried out to the full by him, for he was murdered in the convict settlement of the Andaman Islands. In 1872 Lord Northbrook (Viceroy 1872-3) had to exercise his abilities chiefly in the province of finance. A severe famine which threatened Lower Bengal in 1874 was successfully ward off by the organization of State relief and the importation of rice from Burma. The following year was notable for the deposition of the Galt war of Baroda for misgovernment, and for the tour through India of the Prince of Wales (the late King Edward VII). The visit of the Duke of Edinburgh to India when Lord Mayo was Viceroy had given great pleasure to those with whom he had come in touch, and had established a kind of personal link between India and the Crown. The Prince of Wales's tour aroused unprecedented enthusiasm for and loyalty to the British Raj, and further encouragement was given to the growth of this spirit when, in a durbar of great magnificence held on January 1st 1877, on the famous Ridge at Delhi, Queen Victoria was proclaimed Empress of India. The Viceroy of that time, Lord Lytton, had, however, to deal with a situation of unusual difficulty. Two successive years of drought produced, in 1877-78, the worst famine India had known. The most strenuous exertions were made to mitigate its effects, and eight crores of rupees were spent in importing grain, but the loss of life was estimated at 54 millions. At this time also Afghan affairs once more became prominent.



and men had been lost. This was in itself a heavy burden on the finances of India, which was increased by the serious and widespread famine of 1896-97 and by the appearance in India of bubonic plague. The methods taken to prevent the spread of that disease led in Bombay, to rioting, and elsewhere to the appearance in the vernacular press of seditious articles which made it necessary to make more stringent the law dealing with such writings.

## Lord Curzon's Viceroyalty

With famine and plague Lord Curzon also, who succeeded Lord Linn in 1899, had to deal. In 1901 the cycle of bad harvests came to an end, but plague increased, and in 1901 deaths from it were returned at over one million. Of the many problems to which Lord Curzon directed his attention, only a few can be mentioned here—some indeed claim that his greatest work in India was not to be found in any one department but was in fact the general gearing up of the administration which he achieved by his unceasing energy and personal example of strenuous work. He had at once

to turn his attention to the North West Frontier. The British garrisons beyond our boundary were gradually withdrawn and replaced by tribal levies, and British forces were concentrated in British territory behind them as a support. An attempt was made to check the arms traffic and work on strategic railways was pushed forward. The fact that in seven years he only spent a quarter of a million upon repressive measures and only found it necessary to institute one blockade (against the Mahsud Waziris) is the justification of this policy of compromise between the Lawrence and Lordward schools of thought. In 1901 the trans-Indus districts of the Punjab were separated from that Province, and together with the political charges of the Malakand, the Khiber, Kurram, Tochi, and Wana were formed into the new North-West Frontier Province, under a Chief Commissioner directly responsible to the Government of India. That year also witnessed the death of Abdur Rahman, the Amir of Afghanistan, and the establishment of an understanding with his successor Habibullah. In 1904 the attitude of the Dalai Lama of Tibet being pro-Russian and anti British, it became necessary to send an expedition to Lhasa under Colonel (Sir Francis) Younghusband. The Dalai Lama abdicated and a treaty was concluded with his successor.

### Lord Curzon as Viceroy

In his first year of office Lord Curzon passed the Act which, in accordance with the recommendations of the Fowler Commission, practically fixed the value of the rupee at 1s 4d, and in 1900 a Gold Reserve fund was created. The educational reforms that marked this Viceroyalty are dealt with elsewhere chief among them was the Act of 1904 reorganising the governing bodies of Indian Universities. Under the head of agrarian reform must be mentioned the Punjab Land Alienation Act, designed to free the cultivators of the soil from the clutches of money-lenders, and the institution of Agricultural banks. The efficiency of the Army was increased (Lord Kitchener was Commander-in-Chief) by the re-arming of the Indian Army, the strengthening of the

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## Political Outrages

Outside Bengal attempts to quash the discussion by the ordinary law were fairly successful. But scarcely any province was free from disorder of some kind and though recourse was had to the deportation of persons without reason assigned under an Act of 1815, special Act had to be passed to meet the situation, viz— an Explosives Act, a Prevention of Seditious Meetings Act, and a Criminal Law Amendment Act which provides for a magisterial inquiry in private and a trial before three judges of the High Court without a jury. The need for the reinforcement of the law may be shown by a list of the principal political outrages in India while Lord Minto was Viceroy and subsequent to his departure—

December 1907—Attempt to wreck the  
Lieutenant Governor of Bengal's train at  
Naraingarh

December, 1907 — Attempt on the life of Mr  
B C Allen at Goalundo

March, 1908.—Second attempt to wreck Sir Andrew Fraser's train at Chandernagore

March, 1908 — Attempt to shoot Mr. Higginbotham, a missionary, at Kushtea

April 11th, 1908—Bomb thrown at the  
Mayor of Chandernagore

April 30th, 1908 — Murder of Mrs and Miss Kennedy at Mozafferpore

August, 1908 — Mr Camsie, Mill-manager, severely injured by a bomb on the E B S Railway

August, 1908 — Murder of Narendra Nath Gossain, the approver in the Allpore case, in Allpore Jail

November 6th, 1908 — Attempt on the life of Sir Andrew Fraser at Overtoun Hall

November 9th, 1908 — Murder of Inspector Nundo Lal Banerjee, who arrested Khudiram Bose, in Serpentine Lane, Calcutta

November, 1908 — Sukumar, alleged informer, murdered at Dacca

February 10th, 1908 — Murder of Babu Ashutosh Biswas in the Courtyard at Allpore

June, 1909 — Prio Mohun Chatterji (brother of an approver) stabbed to death at Fatehjangpur

July 1st, 1909 — Assassination of Lieutenant-Colonel Sir William Curzon Wylie, at the Imperial Institute, London

November 13th, 1909 — Bomb explosion near H E Lord Minto's carriage at Ahmedabad

December 21st, 1909 — Assassination of Mr A M T Jackson, I C S, Collector of Nasik

January 24th, 1910 — Murder of Khan Bahadur Shams ul-Alum

February 21st, 1911 — Murder of Head Constable Srish Chakravarty

March 2nd, 1911 — Attempt to murder Mr Cowley, P W D, with a bomb in Calcutta

April 19th, 1911 — Babu Manmohan Dey, witness in Munshiganj bomb case, shot dead at Routhbog

June 17th, 1911 — Murder of Mr Ashe, Collector of Tinnevely

June 18th, 1911 — Murder of Sub-Inspector Raj Kumar Roy at Mymensingh

July 1911 — Sonarang case, Rashun Dewan Duffadar, Amar-Dewan, and Kati Benode Chakravarti shot at Netrapati

September 21st, 1912 — Head Constable Radhifal Roy shot dead at Dacca

December 13th, 1912 — Attempt to assassinate Abdul Rahaman, one of the witnesses for the police in the Midnapore conspiracy case

December 23rd, 1912 — H E Lord Hardinge wounded, and one of his servants killed, by a bomb during the State entry into Delhi

March 27th, 1913 — Attempt to murder Mr Gordon the sub divisional officer, with a bomb at Molvi Bazaar, Sylhet

May 17th, 1913 — Chaprasi in the employ of the Lahore Gymkhana Club killed by a bomb near the Lawrence Gardens, Lahore

September 29th, 1913 — Murder of Head Constable Haripado Deb, College Square, Calcutta

September 30th, 1913 — Bankim Chandra Chowdhury, Inspector of Police at Mymensingh, formerly of Dacca, killed by a bomb

January 19th, 1914 — Narendra Nath Ghose, Inspector of the Calcutta C I D, shot dead on the Chitpur Road, Calcutta. A Tell boy, named Ananda, was also shot dead

November 27th 1914 — Seven persons committed to Ferozapore Sessions for shooting dead

Sub Inspector Bishrat Ali and Zemindar Jowala Singh

February 28th, 1915 — Police Inspector Suresh Chandra Mukerji who had been engaged in connexion with taxi-cab dacoities in Calcutta, shot dead while on duty by four men with revolvers. His orderly was wounded. The assassins escaped

August 25th, 1915 — Commissioner of Danuhatti shot dead. A police constable seriously injured by several revolver shots fired from a Motor Car in an outrage near Calcutta

October 9th, 1915 — Jatindra Mohun Ghose, Deputy Superintendent of Police and his son shot dead at Mymensingh

October 22nd, 1915 — Sub-Inspector Girindra Nath Banerjee killed and another officer wounded in an attempt on the lives of four C I D officers in Calcutta

The list, it will be seen, includes two attempts on the life of the Viceroy himself. It does not include a number of equally significant disturbances, such as the riots in Bombay (June 1908), during the trial of *Tilak*, which led to considerable loss of life. Concurrently with these repressive measures steps were taken to extend representative institutions. In 1907 a Hindu and a Mahomedan were appointed to the Secretary of State's Council, and in 1909 a Hindu was appointed for the first time to the Viceroy's Council. The Indian Councils Act of 1909 carried this policy farther by reconstituting the legislative councils and conferring upon them wider powers of discussion. The executive councils of Madras and Bombay were enlarged by the addition of an Indian member

### Lord Minto

As regards foreign policy, Lord Minto's Viceroyalty was distinguished by the conclusion (1907) between Great Britain and Russia of an agreement on questions likely to disturb the friendly relations of the two countries in Asia generally, and in Persia, Afghanistan and Tibet in particular. Two expeditions had to be undertaken on the North-West frontier, against the Zakka Khels and the Mohmands, and ships of the East Indies Squadron were frequently engaged off Maskat and in the Persian Gulf in operations designed to check the traffic in arms through Persia and Mikan to the frontier of India. Towards Native States Lord Minto adopted a policy of less interference than that followed by his predecessor. He invited their views on sedition, and, in a speech at Udaipur, disclaimed any desire to force a uniform system of administration in Native States, and said he preferred their development with due regard to treaties and local conditions. Lord Minto left India in November, 1910 a few weeks after Lord Morley had resigned the Secretaryship of State, the tenure of their respective posts having been practically identical in point of time. The position of the Viceroy had in those years materially changed. Lord Minto had a weak Council, and this weakness was reflected in the government of Bengal and Madras. But it is more important to note that Lord Morley had extended the policy of transferring the actual government of India from India to London, to such an extent that the Under-



Secretary for India was able to describe the Viceroy as merely the agent of the Secretary of State.

## Visit of the King and Queen

Sir Charles (Lord) Hardinge was appointed to succeed Lord Minto. His first year in India was marked by a weak monsoon and famine in parts of Western India still more by the visit to India of the King Emperor and the Queen, who arrived at Bombay on December 2, 1911. From there they proceeded to Delhi where, in the most magnificent durbar ever held in India, the coronation was proclaimed and various boons, including an annual grant of 50 lakhs for popular education were announced. At the same ceremony His Majesty announced the transfer of the capital of India from Calcutta to Delhi, the reunion of the two Bengals under a Governor in Council, the formation of a new Lieutenant-Governorship for Behar, Chota Nagpur, and Orissa and the restoration of Assam to the charge of a Chief Commissioner. On December 14 a review of 60,000 British and Indian troops was held and on the 15th Their Majesties each laid a foundation stone of the new capital. From Delhi the King went to Nepal, and the Queen to Agra and Rajputana, afterwards meeting at Lucknow and going to Calcutta. Thence they returned to Bombay and sailed for England on January 10. "From all sources public and private," wrote His Majesty to the Premier "I gather that my highest hopes have been realised. Our satisfaction will be still greater if time proves that our visit has contributed to the lasting good of India and of the Empire at large."

In March, 1912, a committee of experts was appointed to advise the Government of India as to the site of the new capital. Temporary buildings were erected to accommodate the Government, and on December 23 the State entry into Delhi was made by the Viceroy. This ceremony was marred by an attempt on His Excellency's life as he passed down the Chandni Chauk. The bomb thrown from a house killed an attendant behind the Howdah in which the Viceroy was sitting, seriously wounded Lord Hardinge, but left Lady Hardinge unscathed. The courage displayed by Their Excellencies was unsurpassed and elicited the admiration of all, but, in spite of the offer of large rewards, the assassin was not caught.

Educational schemes claimed a large place in public attention during 1912 and 1913. In the former year a Royal Commission, under the presidency of Lord Islington, was appointed to inquire into the public services of India. In 1912 also a Committee of four was appointed, under the Chairmanship of Field Marshal Lord Nicholson, to inquire into military policy and expenditure in India. In the following year a Royal Commission was appointed under the Chairmanship of Mr Austen Chamberlain, to investigate and report on certain administrative questions relating to Indian finance and currency which had for some years been much discussed particularly in India.

In the North-East of India an expedition, under Gen Bower, was despatched against the Abors for the punishment of the murderers of Mr Noel Williamson

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In the last part of 1917, the call for a Congress was aroused in India by the arrest of a number of students — many of the students to be mentioned — about the future of India. In South Africa, plotting by Indians in Natal was disapproved by the appointment of a Commission by the Government of a Committee of Inquiry, which the Government of India was requested by Sir Benjamin Pakenham, the Commissioner, to report on the basis of a written statement commonly regarded as reliable. In the autumn of 1914 the Viceroy, Lord Curzon, outlined a reciprocal scheme for controlling concentration in India and in the Colonies as an alternative to the principle of free migration between all parts of the Empire, in which the Government of India had long contended.

In July the death of Lady Hardinge wife of the Viceroy, took place in London after an operation. The courage she had displayed at Delhi when the Viceroy was wounded by a bomb and the sympathetic and active interest she had displayed in the women and children of India, had endeared her to all classes. Her death was widely mourned, and her memory is to be perpetuated by a memorial originated by the Aga Khan.

## Effects of the War

The various effects of the European war upon India are fully discussed elsewhere. But it must here be set on record that the declaration of war was followed in India by an unprecedented declaration of loyalty on all sides and the numerous offers of help or personal service made by the Chiefs and peoples aroused in England a feeling of intense gratitude. A military force numbering some 200,000, was sent from India to Europe and East Africa within a short time of the outbreak of hostilities. The announcement of this fact was made on the same day that a message from the King-Emperor was published in which His Imperial Majesty said — "Amongst the many incidents that have marked the



### Functiōns of Government.

The functions of the Government of India are perhaps the most extensive of any of the administrative bodies in the world. It takes a share in the produce of the land held in the Punjab and Bombay. It has a right to the all rights of land from a multitude of agriculturalists. It undertakes the management of landed estate where the proprietor is disabled. In this it is far from a purely fiscal measure and often rendered necessary by a great deal of misery and suffering. It is also the principal manufacturer of salt and opium. It owns the bulk of the railways of the country and directly or indirectly controls the greater part of the telegraph system. It is the proprietor of the Indian and local currencies and the postal system. It had more to do with the land boards and agriculturists and is gradually increasing its hold on the sale of liquor and forest products and is directly responsible for the post, education, medical and sanitary operations and many public works of the purely fiscal character. The Government has also been dealing with the Native States which collectively cover more than one third of the whole area of India and comprise more than one fifth of its population. The distribution of the great functions between the Government of India and the provincial administrations has been broadly speaking, it may be said, that the tendency of the day is to continue the Government of India to control and the local governments to administer.

### Division of Responsibility

The collapse of Government in India consequent on the decay of Mughul power and the intrigues of the French on the East Coast forced the officers of the Company to assume territorial responsibility in spite of their own desires and the insistent orders of the Director. Step by step the Company became first the dominant, then the paramount power in India. In these changed circumstances the system of government by mutually independent and unwieldy councils of the merchants at the Presidency towns gave rise to grave abuses. Parliament intervened, and under the Regulating Act of 1773, a Governor-General and four councillors were appointed to administer the Presidency of Fort William (Bengal), and the supremacy of that Presidency over Madras and Bombay was for the first time established. The subordinate Presidencies were forbidden to wage war or make treaties without the previous consent of the Governor-General of Bengal in Council, except in cases of imminent necessity. Pitt's Act of 1784, which established the Board of Control in England, vested the administration of each of the three Presidencies in a Governor and three councillors, including the Commander-in-Chief of the Presidency Army. The control of the Governor-General-in-Council was somewhat extended, as it was again by the Charter Act of 1793. Under the Charter Act of 1833 the Company was compelled to close its commercial business, and it became a political and administrative body holding its territories in trust for the Crown. The same Act vested the direction of the entire civil and military administration and sole power of legislation in the Governor-General-in-Council, and defined more clearly the nature and extent of the control to be extended over the subordinate governments. After the Mutiny, there was passed, in 1858, an Act transferring the Government of India from the Company to the Crown. This Act made no important change in the administration in India, but the Governor-General, as representing the Crown, became known as the Viceroy. The Governor-General is the sole representative of the Crown in India, he is assisted by a Council, composed of high officials, each of whom is responsible for a special department of the administration.

The Government of India exercises in its own hands all matters relating to foreign relations, defence, general taxation, currency, debt, tariffs, ports, telegraph and railways. The ordinary internal administration—the assessment and collection of revenue, education, medical and sanitary arrangements and irrigation, buildings and roads, fall within the purview of the Local Government. In all these matters the Government of India exercises a general and constant control. It prescribes lines of general policy and tests their application from the annual administration reports of the Local Authorities. It directly administers certain Imperial departments, such as Railways, Post Office, Telegraphs, the Survey of India and Geology. It employs a number of inspecting officers for those departments primarily left to Local Governments, including Agriculture, Irrigation, Forests, Medical and Archaeology. It receives, and when necessary modifies, the annual budgets of Local Governments, and every new appointment of importance, and every large addition even to minor establishments has to receive its specific sanction. There also exists a wide field of appeal to the Government of India from officials or private individuals who may feel themselves aggrieved by the action of Local Governments, and outside the Presidencies of Madras, Bombay and Bengal, the approval of the Governor General is necessary to the appointment of some of the most important officers of the provincial administration.

### Members of the Government

The Government of India is composed of the Viceroy, the Secretary of State, and the Members of Council. The Viceroy is the representative of the Crown in India, and he is assisted by the Secretary of State, who is the representative of the British Government. The Members of Council are appointed by the Viceroy, and they are responsible to him for the administration of the Government. The Members of Council are divided into two classes: the ordinary Members and the extraordinary Members. The ordinary Members are appointed for a fixed term, and they are responsible for the ordinary business of the Government. The extraordinary Members are appointed for a special purpose, and they are responsible for the special business of the Government. The Members of Council are also divided into two classes: the Indian Members and the European Members. The Indian Members are appointed from among the Indian civil servants, and they are responsible for the Indian business of the Government. The European Members are appointed from among the European civil servants, and they are responsible for the European business of the Government. The Members of Council are also divided into two classes: the Members of the Council of Ministers and the Members of the Council of Secretaries. The Members of the Council of Ministers are appointed from among the Members of Council, and they are responsible for the general administration of the Government. The Members of the Council of Secretaries are appointed from among the Members of Council, and they are responsible for the secretarial work of the Government. The Members of Council are also divided into two classes: the Members of the Council of the Government of India and the Members of the Council of the Government of the Provinces. The Members of the Council of the Government of India are appointed from among the Members of Council, and they are responsible for the general administration of the Government of India. The Members of the Council of the Government of the Provinces are appointed from among the Members of Council, and they are responsible for the general administration of the Government of the Provinces. The Members of Council are also divided into two classes: the Members of the Council of the Government of India and the Members of the Council of the Government of the Provinces. The Members of the Council of the Government of India are appointed from among the Members of Council, and they are responsible for the general administration of the Government of India. The Members of the Council of the Government of the Provinces are appointed from among the Members of Council, and they are responsible for the general administration of the Government of the Provinces.

### Business Procedure

The business of the Government is conducted in the following manner: The Viceroy is the head of the Government, and he is responsible for the general administration of the Government. The Secretary of State is the representative of the British Government, and he is responsible for the secretarial work of the Government. The Members of Council are appointed by the Viceroy, and they are responsible for the administration of the Government. The Members of Council are divided into two classes: the ordinary Members and the extraordinary Members. The ordinary Members are appointed for a fixed term, and they are responsible for the ordinary business of the Government. The extraordinary Members are appointed for a special purpose, and they are responsible for the special business of the Government. The Members of Council are also divided into two classes: the Indian Members and the European Members. The Indian Members are appointed from among the Indian civil servants, and they are responsible for the Indian business of the Government. The European Members are appointed from among the European civil servants, and they are responsible for the European business of the Government. The Members of Council are also divided into two classes: the Members of the Council of Ministers and the Members of the Council of Secretaries. The Members of the Council of Ministers are appointed from among the Members of Council, and they are responsible for the general administration of the Government. The Members of the Council of Secretaries are appointed from among the Members of Council, and they are responsible for the secretarial work of the Government. The Members of Council are also divided into two classes: the Members of the Council of the Government of India and the Members of the Council of the Government of the Provinces. The Members of the Council of the Government of India are appointed from among the Members of Council, and they are responsible for the general administration of the Government of India. The Members of the Council of the Government of the Provinces are appointed from among the Members of Council, and they are responsible for the general administration of the Government of the Provinces. The Members of Council are also divided into two classes: the Members of the Council of the Government of India and the Members of the Council of the Government of the Provinces. The Members of the Council of the Government of India are appointed from among the Members of Council, and they are responsible for the general administration of the Government of India. The Members of the Council of the Government of the Provinces are appointed from among the Members of Council, and they are responsible for the general administration of the Government of the Provinces.

Minister of State, and has the final say in ordinary departmental matters. For any question of special importance, and any matter in which it is proposed to overrule the views of a Local Government, must ordinarily be referred to the Viceroy. Any matter originating in one department which also affects another must be referred to the latter and in the event of the Departments not being able to agree, the case is referred to the Viceroy. The Members of Council meet periodically as a Cabinet—ordinarily once a week—to discuss questions which the Viceroy desires to put before them, or which a member who has been over-ruled by the Viceroy has asked to be referred to Council. If there is a difference of opinion in the Council the decision of the majority ordinarily prevails, but the Viceroy can overrule a majority if he considers that the matter is of such grave importance as to justify such a step. Each departmental office is in the subordinate charge of a Secretary, whose position corresponds very much to that of a permanent Under-Secretary of State in the United Kingdom, but with this difference—that the Secretary is present at Council meetings, that he attends on the Viceroy usually once a week, and discusses with him all matters of importance arising in his Department, that he has the right of bringing to the Viceroy a special notice any case in which he considers that the Viceroy's concurrence should be obtained to action proposed by the Departmental Member of Council, and that his tenure of office is usually limited to three years. The Secretaries have under them Deputy, Under and Assistant Secretaries, together with the ordinary clerical establishments. The Secretaries and Under-Secretaries are usually members of the Indian Civil Service. The Government of India has no Civil Service of its own as distinct from that of the Provincial Governments and officers serving under the Government of India are borrowed from the Provinces.

Secretary, Board of Examiners, Capt O L Peart, I A  
 Officer in Charge of the Records of the Government of India, A F Scholfield, V A (offg)  
 Librarian, Imperial Library, Calcutta, J. A Chapman  
 Agricultural Adviser and Director of the Agricultural Research Institute, Pusa, B Cventry, OIE  
 Superintendent of Natural History Section of Indian Museum, N Annandale, B A, DSC  
 Curator, Industrial Section of Indian Museum, D Hooper, FCS FLS  
 Chief Inspector of Mines G F Adams  
 Controller of Printing, Stationery and Stamps, M J Cogswell  
 Superintendent of Government Printing, J J Melkic  
 Chief Inspector of Explosives Lieut Col C A Muspratt-Williams, R A  
 Administrator-General of Bengal H T Hyde  
 Director Criminal Intelligence, Sir C R Cleveland, KCIE  
 Director-General of Commercial Intelligence, A H Ley

Director of Statistics, G F Shirras  
 Customs and Excise Chemist, R L Jenks  
 GOVERNORS-GENERAL OF BENGAL  
 WILLIAM IN BENGAL

Name	Assumed charge of office
Warren Hastings	1774
Sir John Macpherson, Bart	1785
Earl Cornwallis, K G (a)	1786
Sir John Shore, Bart (b)	1793
Lieut-General the Hon Sir Alured Clarke, K O B (offg)	1798
The Earl of Mornington, P C (c)	1798
The Marquis Cornwallis, K G (2nd time)	1805
Sir George H Barlow, Bart	1805
Lord Minto, P C (d)	1807
The Earl of Moira, K G, P C (e)	1813
John Adam (offg)	1823
Lord Amherst, P C (f)	1823
William Butterworth Bayley (offg)	1828
Lord William Cavendish Bentinck, G O B, G C H, P C	1828
(a) Created Marquess Cornwallis, 15 Aug, 1792	
(b) Afterwards (by creation) Baron Tellemouth	
(c) Created Marquess Wellesley, 2 Dec 1799	
(d) Created Earl of Minto, 24 Feb, 1813	
(e) Created Marquess of Hastings, 2 Dec, 1816	
(f) Created Earl Amherst, 2 Dec, 1826	

Name	Assumed charge of office
Lord William Cavendish Bentinck, G C B, G C H, P C	1834
Sir Charles Metcalfe, Bart (a) (offg)	1835
Lord Auckland, G O B, P C (b)	1836
Lord Ellenborough, P C (c)	1842
William Wilberforce Bird (offg)	1844
The Right Hon Sir Henry Hardinge, G C B (d)	1844
The Earl of Dalhousie, P C (e)	1848
Viscount Canning, P C (f)	1850

- (a) Afterwards (by creation) Baron Metcalfe  
 (b) Created Earl of Auckland, 21 Dec 1836  
 (c) Afterwards (by creation) Earl of Ellenborough  
 (d) Created Viscount Hardinge, 2 May, 1846  
 (e) Created Marquess of Dalhousie, 25 Aug, 1849  
 (f) Afterwards (by creation) Earl Canning

NOTE.—The Governor-General ceased to be the direct Head of the Bengal Government from the 1st May, 1851, when the first Lieutenant-Governor assumed office. On 1st April 1912, Bengal was placed under a separate Governor and the appointments of Lieutenant-Governor was abolished.

#### VICEROYS AND GOVERNORS-GENERAL OF INDIA

Name	Assumed charge of office
Viscount Canning, P C (a)	1858
The Earl of Elgin and Kincardine, K T, G C B, P C	1862
Major-General Sir Robert Napier, K C B (b) (offg)	1863
Colonel Sir William F Denison, K C B (offg)	1863
The Right Hon Sir John Lawrence, Bart, G O B, K O S I (c)	1864
The Earl of Mayo, K P	1869
John Strachey (d) (offg)	1872
Lord Napier of Merchiston, K T (e) (offg)	1872
Lord Northbrook, P C (f)	1872
Lord Lytton, G O B (g)	1876
The Marquess of Ripon, K G, P C	1880
The Earl of Dufferin, K T, G C B, G C M G, P C (h)	1884
The Marquess of Lansdowne, G C M G	1888
The Earl of Elgin and Kincardine, P C	1894
Baron Curzon of Kedleston P C	1899
Baron Ampthill (offg)	1904
Baron Curzon of Kedleston, P C	1904
The Earl of Minto, K G, P C G C M G	1905
Baron Hardinge of Penshurst, P C, G O B, G C M G, G O V O, I S O (i)	1910
(a) Created Earl Canning, 21 May, 1859	
(b) Afterwards (by creation) Baron Napier (of Magdala)	
(c) Afterwards (by creation) Baron Lawrence	
(d) Afterwards Sir John Strachey, G O S I, O L E	
(e) Afterwards (by creation) Baron Napier of Ettrick	
(f) Afterwards (by creation) Earl of Northbrook	
(g) Created Earl of Lytton, 28 April, 1880	
(h) Created Marquis of Dufferin and Ava, 12 Nov 1888	
(i) During tenure of office, the Viceroy is Grand Master and First and Principal Knight of the two Indian Orders (G M S I, and G M I E). On quitting office, he becomes G O S I and G O I E, with the date of his assumption of the Vicerealty.	



## Control over Legislation

The legislative powers of the Imperial Legislative Council are still regulated by the Act of 1861. Certain Acts of Parliament under which the Government of India is constituted cannot be touched and no law can be made affecting the authority of Parliament or allegiance to the Crown. With these exceptions the legislative powers of the Governor-General-in-Council over the whole of the British India are unrestricted. Measures affecting the public debt, or the revenues of India, the religion of any of His Majesty's subjects, the discipline or maintenance of the military or naval forces, and the relations of the Government with foreign states cannot be introduced by any member without the previous sanction of the Governor-General. Every Act requires the

Governor-General's assent. The assent of the Crown is not necessary to the validity of an Act, but the Crown can disallow any Act that has been passed.

Apart from these legislative powers the Governor-General-in-Council is authorized to make, without calling in the Additional Members, regulations having the force of law for the less advanced parts of the country, where a system of administration simpler than that in force elsewhere is desirable. In cases of emergency the Governor-General can, on his own authority and without reference to his Council, make Ordinances which have the force of law for six months.

All Members of the Imperial and Provincial Legislative Councils are entitled to the prefix "Honble Mr." during their term of office.

## A—Elected Members

(Not to be less than 27)

Serial No	Name	Date of commencement of office	Date of expiry of term of office	Electorate
1	Nawab Satiyid Muhammad Sahib Bahadur	11-1-13	10-1-16	Non-official Member, Madras
2	Mr Chakravarti Vijayaghavachariar	Do	Do	Do
3	Sir Ibrahim Rahimtoola, Kt., C I E	Do	Do	Bombay
4	Mr Chimanlal Harilal Setalvad	Do	Do	Do
5	Babu Surendra Nath Banerji	15-2-13	14-2-16	Do
6	Maharaja Ranajit Sinha of Nashipur	Do	Do	Bengal
7	Pandit Bishan Narayan Dar	18-9-14	21-1-16	Do
				United Provinces
8	Pandit Madan Mohan Malaviya	22-1-1	Do	Do
9	Khan Bahadur Mian Muhammad Shadi	11-1-13	10-1-16	Punjab
10	Maung Myé	28-12-12	27-12-15	Burma
11	Mr Madhu Sudan Das, C I E	23-1-13	24-1-16	Do
				Bihar and Orissa
12	Sriyat Ghanasvayam Barua	11-1-13	10-1-16	Do
13	Mr M B Dadabhoi	22-1-14	Do	Assam
				District Councils and Municipal Committees, Central Provinces
14	Rama Rayaningar Venkataranga Bahadur of Panagallu	18-1-13	17-1-16	Landholders, Madras
15	Meherban Sardar Khan Bahadur Rustomji Jehangirji Vakil of Ahmedabad	7-1-13	6-1-16	Do
				Bombay (Sardars of Gujarat)
16	Maharaja Manindra Chandra Nandi of Kasimbazar	22-1-13	21-1-16	Landholders, Bengal
17	Raja Kushalpal Singh, M A, LL B, of Kotla	22-2-13	27-12-15	Do
				United Provinces (Landholders of Agra)
18	Maharaj-Kumar Gopal Saran Narain Singh of Tikari	28-12-12	27-12-15	Do
				Bihar and Orissa
19	Sir Gangadhar Madho Chitnavis, K C I E	11-1-13	10-1-16	Do
				Central Provinces
20	Khan Bahadur Mir Asad Ali Khan	18-1-13	17-1-16	Muhammadan Community, Madras
21	Sir Fazulbhoi Currimbhoi Ibrahim, Kt	11-1-13	10-1-16	Do
22	Mr Abdul Karim Abu Ahmed Ghuznavi	22-1-13	21-1-16	Do
23	Raja Sir Muhammad Ali Muhammad Khan, K C I E, Khan Bahadur, of Mahmudabad	18-1-13	17-1-16	Do
				Bombay Bengal United Provinces
24	Mr Qumrul Huda, Bar-at-Law	11-1-13	10-1-16	Do
				Bihar and Orissa
25	F H Stewart, C I E	6-6-14	27-12-15	Bengal Chamber of Commerce
26	Mr T W Birkett	4-4-14	Do	Bombay Chamber of Commerce
27	Raja Salyid Abu Jafar of Pirpur	18-1-13	17-1-16	Muhammadan Landholders United Provinces

# The Imperial Legislative Council

## B—Nominated Members

(Not exceeding 13)

Name	Date of Commencement of office	Date of expiry of term of office	Province or body represented
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### (A) OFFICIAL MEMBERS

1. Mr. J. P. Wilson
2. Mr. W. H. C. C.
3. Mr. W. H. C. C.
4. Mr. H. A. C. C.
5. Mr. J. P. Wilson
6. Mr. J. P. Wilson
7. Mr. J. P. Wilson
8. Mr. J. P. Wilson
9. Mr. J. P. Wilson
10. Mr. J. P. Wilson
11. Mr. J. P. Wilson
12. Mr. J. P. Wilson
13. Mr. J. P. Wilson
14. Mr. J. P. Wilson
15. Mr. J. P. Wilson
16. Mr. J. P. Wilson
17. Mr. J. P. Wilson
18. Mr. J. P. Wilson
19. Mr. J. P. Wilson
20. Mr. J. P. Wilson
21. Mr. J. P. Wilson
22. Mr. J. P. Wilson

### (C) NON OFFICIAL MEMBERS

1. P. S. Narayanaiah
2. M. U. R. K. K. K.
3. P. S. Narayanaiah
4. M. U. R. K. K.

## Present Constitution of the Council

I—The whole Council  
 II—The whole Council of the Governor General is de-  
 clared that it shall not be lawful for the Governor General to nominate so many non-official persons  
 that the majority of all the Members of the Council shall be non-officials

- Of the Council—
- (a) Members of the Executive Council
  - (b) The Lieutenant-Governor or Chief Commissioner of the Province (1)
  - (c) Nominated Members

Total

Total

### Non Officials (2)—

- (a) Elected Members
- (b) Nominated Members

Official majority, exclusive of the Governor General

The Indian Councils Act, 1861, section 10, provides that not less than one half of the Additional Members (exclusive of the Lieutenant-Governor or Chief Commissioner of the Province) in which the Council may, for the time being be assembled shall be non-officials.

(Present number of Additional Members { Non-officials (elected and nominated)  
 exclusive of the Lieutenant Governor { Vacancies  
 or Chief Commissioner (1) as aforesaid)

(For work of Imperial Legislative Council, Session 191

7
1
27
35
27
5
32
3
60



# The Home Government.

The Home Government of India represents the gradual evolution of the governing board of the old East India Company. The affairs of the Company were originally managed by the Court of Directors and the General Court of Proprietors. In 1784 Parliament established a Board of Control, with full power and authority to control and direct all operations and concerns relating to the civil and military government, and revenues of India. By degrees the number of the Board was reduced and its powers were exercised by the President, the lineal precursor of the Secretary of State for India. With modifications this system lasted until 1858, when the Mutiny, followed by the assumption of the Government of India by the Crown, demanded a complete change. Under the Act of 1858 (now merged in the consolidating measure passed in 1915) the Secretary of State is the constitutional adviser of the Crown on all matters relating to India. He inherits generally all the powers and duties which were formerly vested either in the Board of Control, or in the Company, the Directors and the Secret Committee in respect of the Government and revenues of India. He has the power of giving orders to every officer in India, including the Governor-General, and is in charge of all business relating to India which is transacted in the United Kingdom.

### Secretary of State's Powers

Of these wide powers and duties many rest on his personal responsibility, others can be performed only in consultation with his Council, and for some of these the concurrence of a majority of the members of his Council is required. The Secretary of State may act without consulting the Council in all matters where he is not expressly required by statute to act as "Secretary of State in Council." Appointments by the Crown are made on his advice. Every official communication proposed to be sent to India must be laid before Council, unless it falls under either of two reserved classes. One of these is "Secret communications" dealing chiefly with war and peace, relations with foreign Powers and Native States. The others are those which he may deem "urgent." No matter for which the concurrence of a majority of Council is necessary can be treated as either "secret" or "urgent." In ordinary business, for which the concurrence of a majority of Council is not required, the Secretary of State is not bound to follow the advice of the Council. These provisions reserve to the Secretary of State a wide discretionary power of interference with the Government of India which is exercised in accordance with the temperament of the Secretary of State for the time being. But in all matters of finance, the authority is that of the Secretary of State and the Council and is freely exercised.

### The Council

The Council of India originally consisted of fifteen members appointed by the Secretary of State. By an Act passed in 1907 it now consists of such number of members, not being less than ten & more than fourteen, as the Secretary of State may from time to time determine. The members hold office for seven

years, and this term may, for special reasons of public advantage, which must be laid before Parliament, be extended for five years more. Nine members must be persons who have served or resided in India for at least ten years, and who have not left India more than five years before their appointment. Several of them have usually belonged to the Indian Civil Service, and have been lieutenant-governors of provinces or members of the Viceroy's Executive Council, others are soldiers, educationists, bankers, or men of diplomatic, official or mercantile experience. The object aimed at in the constitution of the Council is to give the Secretary of State, who has little knowledge of the details of the Indian administration, the help of a body of experts. In 1907, in connection with the policy of constitutional reform, two Indians, one a Hindu and the other a Mahomedan, were appointed to vacancies in the Council. This practice is certainly to be maintained. The present Indian members are a Mahomedan and a Sikh.

### The India Office

Associated with the Secretary of State and the India Council is a secretariat known as the India Office, housed at Whitehall. The Secretary of State has two Under Secretaries, one permanent, the other parliamentary, to whom some of his minor duties are delegated. Appointments to the establishment are made by the Secretary of State in Council, but "junior situations" must be filled in accordance with the general regulations governing admission to the Home Civil Service.

The whole cost of the India Office is borne by the revenues of India, though the Home Government makes certain grants and remissions in lieu of a direct contribution amounting to £50,000 a year. The total net cost, including pensions is about £250,000 per annum.

### Secretary of State

The Right Hon. Austen Chamberlain, M.P.

### Under Secretaries of State

Sir Thomas W. Holderness, K.C.B., K.C.S.I.  
The Right Hon. Lord Islington, G.C.B., D.S.O.

### Assistant Under Secretary of State

Sir Lionel Abrahams, K.C.B.

### Council

*Vice-President*, Sir Stoyning William Edgerley, K.C.V.O., C.I.E.  
Sir Felix O. Schuster, Bart.  
Sir Theodore Morison, K.C.I.E.  
Gen. Sir Charles C. Egerton, G.C.B., D.S.O.  
Abbas Ali Balg, C.S.I., LL.D.  
Laurence Currie.  
Sir William Duke, K.C.S.I., K.C.I.E.  
Sirdar Daljit Singh, C.S.I.  
Sir Charles Arnold-White.  
Sir Murray Hamrick, K.C.S.I., C.I.E.  
Sir Charles S. Bayley, G.C.I.E., K.C.S.I., I.S.O.  
*Clerk of the Council*, Sir Lionel Abrahams, K.C.B.  
*Deputy Clerk of the Council*, James H. Seabrooke, C.I.E.

Private Secretary to the Secretary of State, Francis H Lucas, C B

Assistant Private Secretary J C Walton

Political A-D-C to the Secretary of State, Lieut Col Sir J R Dunsop Smith, K C S I C I F

Private Secretary to Sir T W Holderness, C H Kisch

Private Secretary to Lord Ishington, S K Brown

### Correspondence Departments

#### SECRETARIES

Financial F W Newmarch, C S I, and W Robinson

Judicial and Public, Malcolm C C Seton

Military, Gen Sir E G Barrow, G C B, and J H Sclibroke, C I E

Political and Secret, Sir F A Hirtzel, K C B

Public Works, Hermann A Haines

Revenue and Statistics, L J Kershaw C I

Director-in-Chief of the Indo-European Telegraph, Public Works Department, R C Barker, C I F

#### ACCOUNTANT-GENERAL'S DEPARTMENT

Accountant-General, Walter Badoek C S I also Director of Funds and Official Agent to Administrators General in India

STORE-DEPARTMENT—INDIA OFFICE BRANCH—Director-General, George H Collier

INDIA STORE DEPOT—Belvedere Road, Lambeth, S E, Superintendent of the India Store Depot, Captain G T Wingfield, R N

REGISTRY AND RECORD DEPARTMENT—Registrar and Superintendent of Records, W Foster, C I E

### Miscellaneous Appointments

Government Director of Railway Companies, Sir H P Lurt, K C I E

Librarian, Fredk W Thomas, M A, Hon Ph D (Munich)

Secretary for Indian Students, C E Mallet

Educational Adviser to Indian Students, T W Arnold, C I E, Litt D, M A (21, Cromwell Road, S W)

Medical Board for the Examination of Officers of the Indian Services—President, Surg-Gen Lieut-Col Sir R H Charles, G C V O, M D, M S (retd), F R C S I, Member, Lt-Col J Anderson, M B, M S (retd)

Legal Adviser and Solicitor to Secretary of State, Sir S G Sale K C I E

Inspector of Military Equipment and Clothing, Major-Gen Sir John Stevens, K C B

Surveyor and Clerk of the Works, T H Winn, A R I B A

Ordnance Consulting Officer, Lieut-Col M S C Campbell, C I E, R A

Officers of the Indian Army attached to the General Staff, War Office, Lieut-Col A G Stuart, Lt-Col M R Vaughan, Major C L Storr, Capt Sir G Duff Sutherland Dunbar, Bart

Officers of the Indian Army attached to the India Office—Colonels C H Selwyn, A P Harris, Lieut-Col J Strachey, M A O

Consulting Engineer, Sir A. M Rendel, K C I E  
Stockbroker, Horace Hubert Scott  
Auditor, H A Cooper

INDIAN TROOP SERVICE—The business of the Troop Service is under the superintendence of Graeme Thompson, Director of Transports at the Admiralty

### Secretaries of State for India

	Assumed charge
Lord Stanley, P C (a)	1858
The Right Hon Sir Charles Wood, Bart (b)	1859
Earl de Grey and Ripon, P C (c)	1866
Viscount Cranborne (d)	1866
The Right Hon Sir Stafford Northcote, Bart (e)	1867
The Duke of Argyll, K T, P C	1868
The Marquis of Salisbury, P C (2nd time)	1874
The Right Hon Gathorne Hardy, P C, created Viscount Cranbrook, 14 May, 1878 (f)	1878
The Marquis of Hartington, P C (g)	1880
The Earl of Kimberley, P C	1882
Lord Randolph Churchill, P C	1885
The Earl of Kimberley, K G, P C (2nd time)	1886
The Right Hon Sir Richard Assheton Cross, G C B, P C created Viscount Cross, 19 Aug, 1886	1886
The Earl of Kimberley, K G, P C (3rd time)	1892
The Right Hon H H Fowler (h)	1894
Lord George F Hamilton, P C	1895
The Right Hon St John Brodrick (i)	1903
The Right Hon John Morley, O M (j)	1905
The Right Hon The Earl of Crewe, K G	1910
The Right Hon Viscount Morley of Blackburn, O M	1911
The Right Hon The Earl of Crewe, K G (k)	1911
The Right Hon Austen Chamberlain, M P	1915
(a) Afterwards (by succession) Earl of Derby	
(b) " (by creation) Viscount Halifax	
(c) " (by creation) Marquess of Ripon	
(d) " (by succession) Marquess of Salisbury	
(e) " (by creation) Earl of Iddesleigh	
(f) " (by creation) Earl Cranbrook	
(g) " (by succession) Duke of Devonshire	
(h) " (by creation) Viscount Wolverhampton, G C S I	
(i) " (by succession) Viscount Middleton	
(j) " (by creation) Viscount Morley of Blackburn, O M	
(k) " (by creation) Marquess of Crewe, K G	

## India Council Bill.

In July 1913 Lord Crewe, Secretary of State for India, outlined in the House of Lords certain ideas for the reform of the India Council. The purport of these changes was to reduce the number of the Council, and to substitute departments, with certain independent powers, for the Committees which discharge the detailed work of the Council. Nothing more was heard of this scheme until June 1914, when there was published the text of the amending Bill, with an explanatory memorandum thereon.

## Text of the Bill

Appended is the full text of the Bill —

1—(1) The Council of India constituted under the Government of India Act, 1858 (which Act as amended by any subsequent enactment is hereinafter referred to as the principal Act) shall consist of such number of members, not less than seven nor more than ten, as the Secretary of State may from time to time determine.

(2) Unless at the time when an appointment is made to fill a vacancy in the Council two at least of the then existing members of the Council were at the time of their appointment domiciled in India, the person appointed to fill the vacancy must be domiciled in India, and unless at such time as aforesaid six at least of the then existing members were at time of their appointment either domiciled in India or were persons who had served or resided in India for at least ten years and had not ceased so to serve or reside more than five years before the date of their appointment, the person appointed to fill the vacancy must be either domiciled in India, or must have served or resided in India for at least ten years and have not ceased so to serve or reside more than five years before the date of his appointment.

The person appointed to fill a vacancy for which a person domiciled in India is alone eligible shall be selected from amongst the persons whose names appear on a list of persons domiciled in India chosen for the purpose by the members (other than official members) of the Legislative Councils of the Governor General, Governors, Lieutenant Governors and Chief Commissioners, in such manner, subject to such conditions and restrictions, and in such number, as may be prescribed by regulations to be made by the Secretary of State in Council, or by directions issued by the Secretary of State thereunder.

(3) The yearly salary to be paid to a member of the Council shall be one thousand two hundred pounds, provided that such members appointed after the commencement of this Act who at the date of their appointment shall be domiciled in India shall be paid an additional yearly allowance of six hundred pounds.

(4) Where the Secretary of State is of opinion that a person possessing special qualification as a financial expert should be appointed to be a member of the Council on special terms, he may, after recording in a minute to be laid before Parliament the special reasons for the appointment and the special terms on which the appointment is to be made, make the appointment, and the person so appointed shall, notwithstanding anything in the principal Act, or this Act, hold office

for such term and on such conditions, and shall in respect thereof be entitled to such salary and to such pension and other rights and privileges (if any) as His Majesty may, by Order in Council, in each case determine.

Provided that not more than one person appointed under this provision shall be a member of the Council at the same time.

2—(1) Notwithstanding anything in section nineteen of the principal Act, it shall not be necessary for an order or communication sent to India or an order in the United Kingdom in relation to the government of India to be signed by a Secretary of State in such cases as the Secretary of State in Council may otherwise direct, but every such order and communication shall purport to be made by the Secretary of State in Council.

(2) For section twenty of the principal Act (which relates to the powers of the Secretary of State to divide the Council into committees, and to regulate the transaction of business in Council) the following section shall be substituted —

It shall be lawful for the Secretary of State in Council to make rules and orders for the transaction of business as regards the powers which under the principal Act are to be exercised by the Secretary of State in Council.

"Provided that any such rule or order, so far as it affects any matter or question in respect of which the concurrence of a majority at a meeting of the Council is required by this Act, shall not be valid unless made with the concurrence of a majority of the members of Council present at the meeting of Council at which the rule or order is passed."

(3) Such rules and orders as aforesaid may, notwithstanding anything in sections twenty-two, twenty-four, twenty-five, and twenty-six of the principal Act, provide as respects such matters as may be specified in the rules and orders, —

(a) for enabling powers of the Secretary of State in Council to be exercised otherwise than at a meeting of the Council, and where necessary for that purpose for dispensing with any requirement of the principal Act as to the occurrence of the majority of votes of members of Council,

(b) for dispensing with the necessity of submitting to Council or depositing in the Council Room for the perusal of members, orders and communications proposed to be sent to India or to be made in the United Kingdom by the Secretary of State, and of recording and notifying to members of Council the grounds on which any order or communication to India has been treated as urgent.

(4) At a meeting of the Council the quorum shall be three, and meetings of the Council shall be convened and held when and as the Secretary of State may from time to time direct.

(5) Any document required by the principal Act to be signed by two or more members of the Council, either with or without the counter-signature of the Secretary of State, or one of his Under Secretaries or Assistant Under Secretaries

may be signed in such manner as the rules and orders made by the Secretary of State in Council for the transaction of business in his Council may prescribe, and any such document, if signed in accordance with such rules and orders, shall be as valid as if it had been signed in accordance with the provisions of the principal Act

(6) Section twenty-seven of the principal Act (which enables the Secretary of State to send certain secret orders without communicating them to the members of his Council) shall extend to any order, not being an order in respect of which concurrence of a majority at the meeting of the Council is required by the principal Act, which relates to any question gravely affecting the internal tranquillity of India, or the interests of India in any other country, or the peace or security of any part of His Majesty's Dominions, and which in the opinion of the Secretary of State is of the nature to require secrecy, and it is further declared that the said section shall apply to any order which the Secretary of State may send in reply to a despatch received and dealt with by him under section twenty-eight of the principal Act

(7) All rules and orders made under this section shall be laid before Parliament as soon as may be after they are made, and if an address is presented to His Majesty by either House of Parliament within the next subsequent thirty days on which that House has sat after any such rule or order is laid before it praying that the rule or order may be annulled His Majesty in Council may annul the rule or order, and it shall henceforth be void but without prejudice to the validity of anything previously done thereunder

### The Bill Explained

The publication of the Bill was accompanied by a memorandum explaining its provisions in the following terms—

The object of this Bill is to amend the Government of India Act, 1858. The Act of 1858 in transferring the Government of India to the Crown, created the Council of India, defined its powers and those of the Secretary of State and prescribed in great detail the procedure to be followed in the transaction of business

The Act of 1858 has, as regards the numerical strength of the Council and the conditions of office on it, been amended several times. The procedure for the transaction of business is practically unaltered

By the Act of 1858 the strength of the Council was fixed at fifteen members, of whom not less than nine were to be persons who at the time of appointment had served or resided in India for ten years and had not last left India more than ten years. The members were to hold office during good behaviour but were removable upon an address of both Houses of Parliament. Their salary was fixed at £1,200 a year

These provisions have since been altered. The Council now consists of such number of members, not less than ten and not more than fourteen, as the Secretary of State may from time to time determine. Nine members must be persons who at the time of appointment had served or resided in India for ten years, and had not last left India more than five years. The terms of office is limited to seven years but the

Secretary of State may re-appoint a member for a further period of five years. The salary is £1,000 a year. Since 1907 it has been the recognised practice of the Secretary of State to reserve two appointments on the Council for Indians

The procedure for the transaction of business established by the Act of 1858 cannot be varied by rules. The powers of the Secretary of State in Council may be exercised only at meetings of the Council. A Council must be held every week and a quorum of five members is required. In certain matters, however trivial in themselves, the sanction of a majority of votes at a meeting is required. In other matters the Secretary of State may act alone but except in cases where secrecy or urgency can be claimed his proposed order must lie a week on the Council Table before it is sent. The Act contemplates that all business before coming to the Council should be dealt with in Committee, and the Council is divided for this purpose into several Standing Committees

It is proposed by Clause 1 of the Bill to make certain changes in the strength and composition of the Council, and in the emoluments of the members. Also to take power to make rules for simplifying the business procedure of the Council.

With a simplified procedure much of the unimportant work that now occupies the time of the Standing Committees and the Council would be disposed of by the Secretary of State in communication with and with the assistance of individual members. Committees being specially nominated by him when required. A council of ten to fourteen members would then be needlessly large. It is proposed to fix the number at seven to ten, and to return to the rate of salary (£1,200 a year) allowed by the Act of 1858

It is further proposed to convert the present practice of appointing two Indians to the Council into a statutory requirement, to provide that they shall be chosen from names submitted by Indian Legislative Councils, and to grant to them an allowance of £600 a year in addition to salary in view of the expense of residing out of their own country

Provision is also made to enable the Secretary of State to appoint to the Council a financial member on special terms as to salary, pension and tenure of office. The necessity for an exceptional power of this kind has been recognised by the Royal Commission on Indian Currency

Clause 2 of the Bill provides for the simplification of business procedure. It enables the Secretary of State in Council to make rules to modify the procedure prescribed by the Act of 1858. The rules as and when made are to be laid before Parliament. The requirement of a weekly meeting of the Council is also dispensed with and the quorum reduced. The opportunity is taken to enlarge in a way which experience has shown to be desirable the category of cases which may be dealt with by the Secretary of State in his "Secret" Department without informing or consulting his Council.

On the motion of Lord Curzon the Lords rejected the Bill by 96 votes

## The Provincial Governments.

British India is divided into eight large provinces and six lesser charges, each of which is termed a Local Government. The eight major provinces are the Presidencies of Madras, Bombay, and Bengal, the Lieutenant-Governorships of the United Provinces, The Punjab, Burma, and Behar, and the Chief Commissionership of the Central Provinces. The minor provinces are Assam, the North West Frontier Province, Baluchistan, Coorg, Ajmere Merwara and the Andaman Islands. The original division of British authority in India was between the Presidencies of Bengal, Madras and Bombay. Bengal afterwards developed into and was separated from the Government of India and then was gradually divided into provinces as the tide of conquest brought under administration areas too large to be controlled by a single authority. The status and area of these provinces have been varied from time to time to meet the changed conditions of the day. The most recent of these changes was the separation of the North West Frontier from the Punjab in 1901, the division of Bengal into two provinces in 1905, and the final adjustment made in accordance with His Majesty the King's announcement at the Durbar of 1911, whereby the newly-created province of Eastern Bengal and Assam disappeared, and Bengal was re-divided into the Presidency of Bengal, the Lieutenant-Governorship of Behar and Orissa, and the Chief Commissionership of Assam, whilst the headquarters of the Government of India were moved from Calcutta to Delhi and the City of Delhi, with an *enclave* of territory surrounding it, was taken under the direct administration of the Government of India. All Local Governments alike are under the superintendence and control of the Governor-General in Council. They must obey orders received from him, and they must communicate to him their own proceedings. But each Local Government is the Executive head of the administration within the province. By custom, all appointments to Local Governments are for a term of five years.

### The Three Classes

The three Presidencies occupy a superior position. The Civil administration of each is vested in a Governor-in-Council, appointed by the Crown, and usually drawn from English public life. On certain matters they correspond directly with the Secretary of State, a privilege not possessed by other provincial Governments. The Governors are assisted by a Council composed of three members, two members of the Civil Service and, under the Indian Councils Act of 1909, a fourth member who is usually an Indian. Like the Governor-General they are addressed as Your Excellency, and they are escorted by a Bodyguard. The maximum salaries as fixed by Act of Parliament are Rs 1,20,000 for a Governor and Rs. 64,000 for a member of Council.

Lieutenant-Governors are appointed by the Governor-General subject to the approbation of the Crown. They must have served for at least ten years in India. Under the Indian Councils Act power was taken to create executive councils in the Lieutenant-Governorships and this has been applied to Behar where the Lieutenant-Governor is assisted by a Coun-

cil consisting of two members of the Civil Service and one Indian. Lieutenant-Governors are addressed as Your Honour. Their maximum salary, Rs 1,00,000, is fixed by Act of Parliament.

Chief Commissioners stand upon a lower footing, being delegates of the Governor-General in Council. In theory, a Chief Commissioner administers his province on behalf of the Governor-General in Council, who may resume or modify the powers that he has himself conferred. In practice, the powers entrusted to Chief Commissioner of the Central Provinces are as wide as those exercised by a Lieutenant Governor. The salary of a Chief Commissioner is Rs 50,000 but in the case of the Central Provinces this was raised to Rs 62,000 in consideration of the addition of Berar to his Government.

### Provincial Councils

The changes made in the constitution and non-legislative functions of the Legislative Councils of Madras and Bombay by the Act of 1909 more than doubled the number of members, election by specially constituted electorates was introduced, and powers were given to members to debate and move resolutions on the provincial financial statements, to move resolutions on matters of general public interest, and to ask supplementary questions. A description of the system in Bombay will show how the scheme works. The Bombay Legislative Council is composed of four *ex-officio* members (the three members of the Executive Council and the Advocate-General) and 44 additional members. Of the additional members, the Governor nominates twenty-three (of whom not more than fourteen may be officials) and 21 are elected. The Government is thus without a majority of officials in the Council. Of the elected members, eight are elected by groups of municipalities and the District Boards, four by Mahomedan electorates, and three by electorates of the land-holding classes. The Bombay University, the Bombay Municipal Corporation, the Bombay Chamber of Commerce, the Karachi Chamber of Commerce, and the Mill-owner's Association, and the Indian Commercial Community, each elect one member. The regulations for the formation of electorates, and as to the qualifications and disqualifications of candidates and voters, are similar to those made in the case of the Supreme Council.

The rules for the discussion of the annual financial statement are similar to those applicable to the Supreme Council. The Financial Statement is presented and considered as a whole and then in detail, and resolutions may be moved. The Government is not bound by any resolutions which the Council may pass. Matters of general public interest under the control of Local Governments may be made the subject of resolutions. Laws passed by these Legislative Councils require the sanction of the Governor-General and may be disallowed by the Crown.

In constitution, in functions, and in the system of special electorates, the Legislative Councils in the Lieutenant-Governorships resemble in all the essential particulars the Legislative Council of Bombay.

### The Secretariat

Each Local Government works through a Secretariat, which is divided into various departments, each under a Secretary. In addition to the Secretaries, there are special departmental heads such as the Inspectors General of Police, Jails and Registration, the Director of Public Instruction, the Inspector-General of Civil Hospitals or Surgeon-General, the Sanitary Commissioner and the Superintendent of the Civil Veterinary Department. There are also Chief Engineers for Public Works and Irrigation, who are likewise Secretaries to Government. In nearly all the Provinces except Bombay, the revenue departments are administered under Government, by a Board of Revenue.

### The District Officer

The administrative system is based on the repeated sub-division of territory, each administrative area being in the responsible charge of an officer who is subordinate to the officer next in rank above him. The most important of these units is the District, and India embraces more than 250 Districts, with an average area of 4,430 square miles and an average population of 931,000. In Madras there is no local officer above the head of the Districts where a Commissioner has the supervision of a Division comprising from four to six Districts. The head of a District is styled either the Collector and District Magistrate or the Deputy Commissioner. He is the representative of the Government and embodies the power of the State. He is concerned in the first place with the land and the land revenue. He has also charge of the local administration of the excise, income tax, stamp duty and other sources of revenue. As a Magistrate of the first class, he can imprison for two years and fine up to a thousand rupees. In practice he does not try many criminal cases, although he supervises the work of the other Magistrates in the District.

In addition to these two main departments, the Collector is interested in all matters pertaining to the welfare of the people. In some branches of the administration his functions are, in consequence of the formation of special departments such as those of Public Works, Forests, Jails, Sanitation, and Education less direct than was formerly the case. But even in matters dealt with by separate departments, his active co-operation and direction in counsel are needed. The Municipal Government of all considerable towns is vested in Municipalities but it is the duty of the Collector to guide and control their working. He is usually the Chairman of the District Board which, with the aid of subsidiary boards, maintains roads, schools and dispensaries, and carries out sanitary improvements in rural areas.

### Other Officers

Other important district officers are the Superintendent of Police, who is responsible for the discipline and working of the police force and the Civil Surgeon, who (except in Bombay) is the head of the medical and sanitary administration. The local organisation of Government Public Works, Forests, Education and other special departments varies in different parts of the country. Each District has its own law officer, styled the Government Pleader.

The Districts are split up into sub-divisions, under Junior Officers of the Indian Civil Ser-

vise or members of the Provincial Service called Deputy Collectors. In Madras, Bombay and the United Provinces there are smaller sub-district units called taluks or tahsils, administered by tahsildars (Bombay Mahaldars), with naib tahsildars or mahalkarris. The tahsildar is assisted by subordinate officers, styled revenue inspectors or kanungos and the village officers. The most important of the latter are the headman who collects the revenue, the karnam, karkun or patwari who keeps the village accounts, and the chauthdar or village watchman.

### Trend of Provincial Government.

The relations of the Provincial administrations with the Government of India form the subject of incessant discussion. On the one side there are the strong centralisers who would focus all authority in the Government of India, on the other those stout advocates of provincial autonomy who would make the Local Governments virtually independent of the Government of India. The trend of Indian policy since the departure of Lord Curzon has been steadily in the direction of increasing the authority of the Provincial Governments and the control and interference of the Government of India has been materially reduced, especially in financial matters. There was a marked development of this policy adumbrated in the despatch of the Government of India which was submitted to the Secretary of State, the proposal to remove the headquarters of the Government of India from Calcutta to Delhi. This paragraph thus indicated the ideas of the supreme authorities, although the extreme interpretation placed upon it by some Indian publicists had to be repudiated, it remains the most authoritative exposition of the trend of Indian policy.

The maintenance of British rule in India depends on the ultimate supremacy of the Governor General in Council, and the Indian Councils Act of 1909, itself bears testimony to the impossibility of allowing matters of vital concern to be decided by a majority of non-official votes in the Imperial Legislative Council. Nevertheless it is certain that, in the course of time the just demands of Indians for a larger share in the government of the country will have to be satisfied, and the question will be how this devolution of power can be conceded without impairing the supreme authority of the Governor General in Council. The only possible solution of the difficulty would appear to be gradually to give the Provinces a larger measure of self-Government, until at last India would consist of a number of administrations, autonomous in all provincial affairs with the Government of India, above them all, and possessing power to interfere in case of misgovernment, but ordinarily restricting their functions to matters of Imperial concern. In order that this consummation may be attained, it is essential that the supreme Government should not be associated with any particular Provincial Government. The removal of the Government of India from Calcutta is, therefore, a measure which will in our opinion, materially facilitate the growth of Local Self-Government on sound and safe lines. It is generally recognised that the capital of a great central Government should be separate and independent, and effect has been given to this principle in the United States, Canada and Australia.

# Administrative Divisions.

Provinces	No of Districts	Area in Square miles	Population (1911)
Ajmer Merwara	2	2,711	501,305
Andamans and Nicobars		3,113	20,450
Assam	12	52,050	6,713,635
Baluchistan	6	15,804	414,112
Bengal	23	78,112	15,481,077
Bihar and Orissa	21	83,205	34,400,034
Bombay (Presidency)	26	123,061	10,672,642
Bombay	26	75,018	16,113,042
Sind	6	17,066	3,513,433
Aden		80	46,163
Burma	41	236,738	12,115,217
Central Provinces and Berar	22	100,145	13,016,303
Coorg	1	1,582	174,970
Madras	24	111,726	41,105,401
North-West Frontier Province (Districts and administered Territories)	5	16,406	2,166,933
Punjab	20	97,200	10,971,056
United Provinces of Agra & Oudh	48	107,161	47,182,044
Agra	36	83,193	14,624,040
Oudh	12	23,966	12,558,004
<b>Total British Territory</b>	<b>267</b>	<b>1,097,001</b>	<b>244,267,512</b>

States and Agencies	No of Districts	Area in Square miles	Population (1911)
Baluchistan States		80,511	390,432
Baroda State		8,000	2,032,793
Bengal States		32,773	4,538,161
Bombay States		65,761	7,411,567
Central India Agency		78,772	9,356,980
Central Provinces States		31,188	2,117,002
Eastern Bengal and Assam States			575,835
Hyderabad State		82,098	13,374,076
Kashmir State		80,900	3,158,133
Madras States		9,969	4,811,841
Cochin State			918,110
Travancore State			3,428,975
Mysore State		29,444	5,806,193
North-West Frontier Province (Agencies and Tribal areas)			1,622,094
Punjab States		36,532	4,212,794
Rajputana Agency		127,541	10,530,432
Sikkim			87,920
United Provinces States		5,979	382,036
<b>Total Native States..</b>		<b>675,267</b>	<b>70,864,995</b>
<b>Grand Total, India..</b>		<b>1,773,168</b>	<b>315,132,537</b>

## The Bombay Presidency.

The Bombay Presidency stretches along the west coast of India, from Sind in the North to Kinnara in the South. It embraces, with its feudatories and Aden, an area of 186,023 square miles and a population of 27,084,317. Of this total 65,761 square miles are in Native States, with a population of 7,411,675. Geographically included in the Presidency but under the Government of India is the first class Native State of Baroda with an area of 8,182 square miles and a population of 2,032,708. The outlying post of Aden is under the jurisdiction of the Bombay Government. It has an area of 80 square miles and a population of 46,105.

The Presidency embraces a wide diversity of soil, climate and people. In the Presidency Proper are the rich plains of Gujarat, watered by the Nerbudda and the Tapti, whose fertility is so marked that it has long been known as the Garden of India. South of Bombay City the province is divided into two sections by the Western Ghats, a range of hills running parallel to the coast. Above Ghats are the Deccan Districts, with a poor soil and an arid climate, south of these come the Karnatic Districts. On the sea side of the Ghats is the Konkan, a rice-growing tract, intercepted by creeks which make communication difficult. Then in the far north is Sind, totally different from the Presidency Proper, a land of wide and monotonous desert except where irrigation from the Indus has brought abounding fertility.

### The People

The population varies as markedly as soil and climate. In Sind Mahomedans predominate. Gujarat has remained true to Hinduism although long under the dominion of powerful Mahomedan kings. Here there is an amplitude of caste divisions, and a people, who although softened by prosperity, are amongst the keenest trading races in the world. The Deccan peasant has been seasoned by adversity, the saying goes that the Deccan expects a famine one year in every three, and gets it, the population is much more homogeneous than in Gujarat, and thirty per cent are Mahattas. The Karnatic is the land of the Lingayets, a Hindu reforming sect of the twelfth century, and in the Konkan there is a large proportion of Christians. Four main languages are spoken, Sindhi, Gujarati, Marathi and Kanarese, with Urdu a rough *lingua franca* where English has not penetrated. The main castes and tribes number five hundred.

### Industries

The principal industry is agriculture, which supports sixty-four per cent of the population. In Sind the soils are wholly alluvial, and under the influence of irrigation produce yearly increasing crops of wheat and cotton. In Gujarat they are of two classes, the black cotton soil, which yields the famous Broach cottons, the finest in India, and alluvial which under careful cultivation in Ahmedabad and Kaira makes splendid garden land. The dominant soil characteristic of the Deccan is black soil, which produces cotton, wheat, gram and millet, and in certain tracts rich crops of sugar cane. The Konkan is a rice land, grown under the abundant rains of the submontane regions, and in the south the Dharwar cotton vies with Broach as the best in India. There

are no great perennial rivers suitable for irrigation, and the harvest is largely dependent upon the seasonal rainfall, supplemented by well irrigation. A chain of irrigation works, consisting of canals fed from great reservoirs in the region of unfailing rainfall in the Ghats, is gradually being completed, and this will ultimately make the Deccan immune to serious drought. More than any other part of India the Presidency has been scourged by famine and plague during the past fifteen years. The evils have not been unmixed, for tribulation has made the people more self-reliant, and the rise in the values of all produce, synchronising with a certain development of industry, has induced a considerable rise in the standard of living. The land is held on what is known as the ryotwari tenure, that is to say, each cultivator holds his land direct from Government under a moderate assessment, and as long as he pays this assessment he cannot be dispossessed.

### Manufactures

Whilst agriculture is the principal industry, others have no inconsiderable place. The mineral wealth of the Presidency is small, and is confined to building stone, salt extracted from the sea, and a little manganese. But the handicrafts are widely distributed. The handloom weavers produce bright-coloured saris, and to a diminishing extent the exquisite kincobs of Ahmedabad and Surat. Bombay silver ware has a place of its own, as well as the brass work of Poona and Nasik. But the tendency is to submerge the indigenous handicrafts beneath industry organised on modern lines. Bombay is the great centre in India of the textile trade. This is chiefly found in the headquarter city, Bombay, where the industry embraces 3,009,172 spindles and 48,845 looms and employs 109,860 hands and consumes 3,773,133 cwts of cotton. This industry is now flourishing, and is steadily rising in efficiency. In lieu of producing immense quantities of low grade yarn and cloth, chiefly for the China market, the Bombay mills now turn out printed and bleached goods of a quality which improves every year, and the principal market is at home. Whilst the industry centres in Bombay City, there are important offshoots at Ahmedabad, Broach and Sholapur. In Ahmedabad there are 978,610 spindles and 22,705 looms; in Sholapur 235,060 spindles and 3,460 looms, and in the Presidency 47,54,694 spindles and 82,436 looms. It is expected that the prosperity of the Bombay trade will be quickened, as a project, now in operation, for the substitution of electricity for steam—the electricity is generated at a hydro-electric station in the Ghats, fifty miles distant—turnishes cheap and efficient power. Its situation on the western-sea-board, in touch at once with the principal markets of India and the markets of the west, has given Bombay an immense sea-borne trade. The older ports, Surat, Broach, Cambay and Mandvie, were famous in the ancient days, and their bold and hardy mariners carried Indian commerce to the Persian Gulf and the coasts of Africa. But the opening of the Suez Canal and the increasing size of ocean steamers have tended to concentrate it in modern ports with deep water anchor-



ages, and the sea-borne trade of the Presidency is now concentrated at Bombay and Karachi, although attempts are being made to develop Mormugao, in Portuguese territory, into an outlet for the trade of the Southern Mahratta Country. The sea-borne trade of the Bombay Presidency (including Sind) was valued in 1914-15 at Rs 152 crores (imports Rs. 61 crores exports Rs 51 crores, costing Rs 36 crores) That of Sind at Rs 44 crores

### Administration

The Presidency is administered by a Governor-in-Council. The Governor is appointed by the Crown, and is usually drawn from the ranks of those who have made their mark in English public life. He is assisted by a Council of three members, two of whom are drawn from the Indian Civil Service, and the third in practice is an Indian. Each Member takes special charge of certain departments, and cases where differences of opinion occur, or of special importance, are decided 'in Council'. All papers relating to public service business reach Government through the Secretariat, divided into five main departments each under a Secretary (a) Revenue and Financial (b) Political, Judicial, and Special (c) General, Educational, Marine and Ecclesiastical (d) Ordinary Public Works (e) Irrigation. The senior of the three Civilian Secretaries is entitled the Chief Secretary. The Government frequently moves. It is in Bombay from November to the end of March, at Mahabaleshwar from April to June, in Poona from June to September, and at Mahabaleshwar from October to November, but the Secretariat is always in Bombay. Under the Governor-in-Council the Presidency is administered by four Commissioners. The Commissioner in Sind has considerable independent powers. In the Presidency Proper there are Commissioners for the Northern Division, with headquarters at Ahmedabad, the Central Division at Poona, and the Southern Division at Belgaum. Each district is under a Collector, usually a Covenanted Civilian, who has under him one or more Civilians as Assistant Collectors, and one or more Deputy Collectors. A collectorate contains on an average from eight to ten talukas, each consisting of from one to two hundred villages whose whole revenues belong to the State. The village officers are the patel, who is the head of the village both for revenue and police purpose, the talati or kulkarni, clerk and accountant, the messenger and the watchman. Over each Taluka or group of village is the mamlatdar, who is also a subordinate magistrate. The charge of the Assistant Deputy Collector contains three or four talukas. The Collector and Magistrate is over the whole District. The Commissioners exercise general control over the Districts in their Divisions. The control of the Government over the Native States of the Presidency is exercised through Political Agents.

### Justice

The administration of justice is entrusted to the High Court sitting in Bombay, and comprising a Chief Justice, who is a barrister, and six puisne judges, either Civilians, Barristers, or Indian lawyers. In Sind the Court of the Judicial Commissioner (three

judges, one of whom must be a barrister) is the highest court of civil and criminal appeal. Of the lower civil courts the court of the first instance is that of the Subordinate Judge recruited from the ranks of the local lawyers. The Court of first appeal is that of the District or Assistant Judge, or of a first class subordinate Judge with special powers. District and Assistant Judges are Indian Civilians, or members of the Provincial Service. In cases exceeding Rs 5,000 in value an appeal from the decision of the Subordinate or Assistant Judge and from the decision of the District Judge in all original suits lies to the High Court. District and Assistant Judges exercise criminal jurisdiction throughout the Presidency, but original criminal work is chiefly disposed of by the Executive District Officers. Capital sentences are subject to confirmation by the High Court. In some of the principal cities Special Magistrates exercise summary jurisdiction (Bombay has four Presidency Magistrates, as well as Honorary Magistrates exercising the functions of English Justices of the Peace) and a Court of Small Causes corresponding to the English Country Courts.

### Local Government.

Local control over certain branches of the administration is secured by the constitution of local boards and municipalities, the former exercising authority over a District or a Taluka, and the latter over a city or town. These bodies are composed of members either nominated by Government or elected by the people, who are empowered to expend the funds at their disposal on education, sanitation, the construction of roads and tanks, and general improvements. Their funds are derived from cesses on the land revenue, the toll and ferry funds. The tendency of recent years has been to increase the elective and reduce the nominated element, to allow these bodies to elect their own chairmen, whilst large grants have been made from the general revenues for water supply and drainage.

### Finance

The finance of the provincial governments is marked by definite steps toward provincial financial autonomy. Up to 1870 there was one common purse for all India. Since then progressive steps have been taken to increase the independence of local Governments. Broadly, certain heads of revenue are divided with the Imperial Government, whilst certain growing heads of revenue, varying in each province, are allotted to the local Government. Thus in Bombay the land revenue, stamp revenue and revenue from assessed taxes are divided with the Government of India. All other local sources of revenue go intact to the local Government. The provincial Budget for 1915-16 shows an opening balance of Rs 154 lakhs, revenue 749 lakhs, expenditure 771 lakhs and the closing balance Rs 131 lakhs. These large balances are due to grants from the Imperial Governments for non-recurring expenditure.

### Public Works

The Public Works Department is under the control of two Chief Engineers who act as Secretaries to the Government, one for General Works and the other for Irrigation.

Under them are Superintending Engineers in charge of divisions and Executive Engineers in charge of districts, with the Consulting Architect. The chief irrigation works are in Sind and consist of a chain of canals fed by the annual inundations from the Indus and one perennial canal the Jamrao. In the Presidency proper the principal protective works are the Nera Canal Gohak Canal, Mutha Canal and the Godavari Canal Scheme. In addition there is under construction a chain of protective irrigation works, originating in reservoirs in the Ghat regions. The first of these the Godavari Scheme, is now in operation, the Pravara Scheme and the Nira Scheme have recently been sanctioned. The Public Works budget for the current year is 80 lakhs of rupees.

### Police

The Police Force is divided into three categories District Police, Railway Police and the Bombay City Police. The District Police are under the Inspector-General who is either a member of the Gazetted Force or a Covenanted Civilian. Under him are the Deputy Inspector-Generals for Sind and the Northern and Southern Ranges of the Presidency proper, for Railways and for Criminal Investigation. District Superintendents of Police have charge of each District with a regular cadre comprising Assistant Superintendents, Sub-Inspectors, Chief Constables and Constables. The Bombay City Police is a separate force maintained by Government under a Commissioner who is responsible direct to Government. The Training School at Nasik prepares young gazetted officers and the rank and file for their duties. The cost of the Police is 112 lakhs.

### Education

Education is imparted partly through direct Government agency, partly through the medium of grants-in-aid. Government maintain Arts Colleges at Bombay, Poona and Gujarat, the Grant Medical College, the Poona College of Science, the Agricultural College, Veterinary College, School of Art, Law School and a College of Commerce. A Science College in Bombay is now in course of construction. Also in Bombay City, and the headquarters of each district, a model secondary school. The other secondary schools are in private hands, the majority of the primary schools are maintained by District and Local Boards with a grant-in-aid. The Bombay Municipality is responsible for primary education in Bombay City. There are now in the Presidency 10 Arts Colleges, 173 High Schools, 14,661 Primary schools, with 1,029,017 scholars. The Government Educational Budget is 76 lakhs.

The Educational Department is administered by a Director with an Inspector in each Division and a Deputy Inspector with Assistants in each district. Higher education is controlled by the Bombay University (established in 1857) consisting of the Chancellor (the Governor of the Presidency), the Vice Chancellor (appointed by Government for two years), and 110 Fellows of whom 10 are *ex-officio*, 10 elected by the Graduates, 10 by the Faculties, and 80 are nominated by the Chancellor.

The principal educational institutions are —  
**Government Arts Colleges—**  
 Elphinstone College, Bombay, Principal Wilkinson  
 Deccan College, Poona, Principal Mr H G Rawlinson  
 Gujarat College, Ahmedabad, Principal Mr Rev W G Robertson

### Private Arts Colleges—

St. Xavier's, Bombay (Society of Jesus)  
 Principal Rev Father Goodyear  
 Wilson College, Bombay (Scottish Mission)  
 Principal Rev Dr Mackichan  
 Ferguson College, Poona (Deccan Educational Society), Principal the Hon'ble Mr. R. P. Paranjpe  
 Baroda College, Baroda (Baroda State)  
 Principal Mr Clarke  
 Samaldas College, Bhavnagar (Bhavnagar State) Principal Mr Unwalla  
 Bahauddinbhai College, Junagadh State, Principal Mr Scott

### Special Colleges—

Grant Medical College, Bombay (Government), Principal Lt. Col Street, M.S.  
 College of Science, Poona (Government), Principal Dr Allen  
 Agricultural College, Poona (Government), Principal Dr Harold Mann  
 Chiefs' College, Rajkot, Principal Mr Mayne  
 College of Science, Ahmedabad  
 Law School, Bombay, Principal, Mirza Ali Akbar Khan  
 College of Commerce, Bombay, Principal, Mr P Anstey  
 Veterinary College, Bombay, Mr K Hewlett  
 Bombay Bacteriological Laboratory, Director: Major Liston, M.S.  
 Sir J. J. School of Art, Bombay (Government), Principal Mr Cecil Burns  
 Victoria Technical Institute, Bombay, Principal Mr T Dawson

### Medical

The Medical Department is in charge of the Surgeon-General and Sanitation of the Sanitary Commissioner, both members of the Indian Medical Service. Civil Surgeons stationed at each district headquarters are responsible for the medical work of the district, whilst sanitation is entrusted to one of the Deputy Sanitary Commissioners. Three large hospitals are maintained by the Government in Bombay, and well equipped hospitals exist in all important up-country stations. Over four million persons including 67,000 in-patients are treated annually. The Presidency contains 7 Lunatic Asylums and 16 institutions for the treatment of Lepers. Vaccination is carried out by a staff under the direction of the Sanitary Commissioner. Sanitary work has received an immense stimulus from the large grants made by the Government of India out of the opium surpluses.

### Governor and President in Council

His Excellency The Right Hon'ble Freeman Freeman-Thomas Baron Willingdon of Ratton, G.C.I.E. Took his seat 5th April 1913

### Personal Staff

J. Cremer, I.C.S. J.P., Private Secretary  
 Major J. G. Greig, C.I.E., Pioneers, M.S.  
 Secy

Captain Rigby, R.A.M.C., Surgeon to H. F. the Governor

Capt. K. O. Goldie, 10th Duke of Cambridge's Own Lancers (Hodson's Horse), Aide-de-Camp

Captain J. C. R. Gannon, 23rd Cavalry, Extra Aide-de-Camp

Capt. K. O. Goldie, 10th Lancers, Official Commandant, H. E. the Governor's Body Guard

Subedar-Major Sher Muhammad Khan, 121st Pioneers, Indian Aide-de-Camp

#### Members of Council

Mr W. D. Sheppard, C.I.F., I.C.S.

Mr George Carmichael, C.S.I., I.C.S.

Mr Mahadev Bhaskar Chaulal, C.S.I., F.A.I.B.

#### Additional Members of Council

##### Elected

Moulvie Rafiuddin Ahmad, Bar-at-Law, Elected by the Muhammadan Community of the Central Division

Mr D. V. Belvi, B.A., LL.B. Elected by the Municipalities of the Southern Division

Mr G. M. Bhurgri, Bar-at-Law, Elected by the Jaghirdars and Zamindars of Sind

Mr Haji Suleman Abdul Wahed, Elected by the Muhammadan Community of the City of Bombay

Sardar Syed Ali El Edroos, Elected by the Muhammadan Community of the Northern Division

Mr K. R. Godbole, Elected by the District Local Boards of the Central Division

Shaikh G. H. Hidayatallah, LL.B. Elected by the District Local Boards of the Sind Division

Sardar Sir Chinubhai Madhavlal, Bart., C.I.E. Elected by the Millowners' Association of Ahmedabad

Mr Dinsha Edulji Wacha, Elected by the Municipal Corporation of the City of Bombay

Mr G. K. Parekh, B.A., LL.B. Elected by the Municipalities of the Northern Division

Mr V. J. Patel, Bar-at-Law, Elected by the District Local Boards of the Northern Division

Sardar B. A. Saheb Patwardhan, Chief of Kurundwad (Senior), Elected by the Sardars of the Deccan.

Mr Abdul Hussein Adamji Peerbhoy, Elected by the Muhammadan Community of the Southern Division

Sardar Dulabawa Raisingji, Thakor of Kerwada, Elected by the Sardars of Gujarat

Mr Manmohandas Ramji, Elected by the Indian Commercial Community

Mr Malcolm N. Hogg, Elected by the Bombay Chamber of Commerce

Rao Bahadur S. K. Rodda, Elected by the District Local Boards of the Southern Division

Mr. Narayan Madhav Samarth, Elected by the University of Bombay

Mr S. B. Upasani, Elected by the Municipalities of the Central Division

Mr Harchandral Vishindas, B.A., LL.B. Elected by the Municipalities of the Sind Division

Mr M. De Pomeroy Webb, C.I.F. Elected by the Karachi Chamber of Commerce

#### Nominated

The Advocate General (*ex-officio*)

Lt.-Col. James Jackson, M.B., I.M.S.

Mr G. S. Curtis

Mr Henry Staveland Lawrence, L.C.S.

Dr Dominick Anthony D. Monte

Sir Jamssetjee Jeejeebhoy, Bart.

Mr B. S. Kamat

Mr N. D. Khandalavala, B.A.

Mr J. H. Kothari

Mr J. A. D. McBain

Mr Lalubhai Samaldas Mehta, C.I.I.

Mr T. P. Orr, C.S.I., I.C.S.

Rao Sahib V. S. Nalk

Mr J. F. Nicholson

Rao Bahadur R. M. G. Ilkantha, B.A.

Mr R. P. Pranjpe

Sir Ibrahim Rahimtoola, Kt., C.I.F.

Rao Bahadur G. K. Sathe

Mr W. H. Sharp

Sir F. L. Sprott

Surgeon-General R. W. S. Lyons

#### SECRETARIES TO GOVERNMENT

Political, Special and Judicial—L. Robertson, I.C.S.

J. E. C. Jukes, I.C.S., *Deputy Secretary Judicial and Political Departments* (Temporary)

Revenue, Financial and Separate—The Hon'ble Mr George S. Smour, C.S.I., I.C.S.

General, Educational, Marine and Ecclesiastical—P. W. Monie

Legal Department and Remembrancer of Legal Affairs—George Douglas French, B.A., I.C.S.

Public Works Department—H. F. Beale, and R. J. Kent (*Joint Secretary*)

#### MISCELLANEOUS APPOINTMENTS (S. C.)

Advocate General, The Hon. Mr M. R. Jardine

Inspector-General of Police, W. L. Berkelev, Souter, C.I.E.

Director of Public Instruction, The Hon. Mr W. H. Sharp

Surgeon-General, The Hon. Surgeon-General R. W. S. Lyons, I.M.S.

Oriental Translator, Muhammad Kadir Shaikh Taluqdari Settlement Officer, R. G. G. Gordon, I.C.S.

Settlement Commissioner and Director of Land Records, C. N. Seddon, L.O.B.

Director of Agriculture and Co-operative Societies, G. F. Keatinge, C.I.E.

Registrar of Co-operative Societies, R. B. Ewbank (on deputation)

George Dick ( <i>Officiating</i> )	1702
John Griffith ( <i>Officiating</i> )	1705
Jonathan Duncan	1705
Died, 11th August, 1811	
George Brown ( <i>Officiating</i> )	1811
Sir Van Nepcan, Bart	1812
The Hon Mountstuart Elphinstone	1810
Major-General Sir John Malcolm, G C B	1827
Lieut-General Sir Thomas Sidney Beckwith, K C B	1830
Died, 15th January, 1831	
John Romer ( <i>Officiating</i> )	1831
The Earl of Clare	1831
Sir Robert Grant, G C B	1835
Died, 9th July, 1838	
James Farish ( <i>Officiating</i> )	1838
Sir J. Levee Carnac, Bart	1830
Sir William Hay Macnaghten, Bart (b)	
George William Anderson ( <i>Officiating</i> )	1841
Sir George Arthur Bart, K C B	1842
Leitch Robert Reid ( <i>Officiating</i> )	1846
George Russell Clerk	1847
Viscount Falkland	1848
Lord Elphinstone, G C B, P C	1853
Sir George Russell Clerk, K C B (2nd time)	1860
Sir Henry Bartle Edward Frere, K C B	1862
The Right Hon William Robert Seymour	1867
Viscount FitzGerald	
Sir Phillip Edmund Wodehouse, K C B	1872
Sir Richard Temple, Bart, K C S I	1877
Honel Robert Ashburner, C S I ( <i>Acting</i> )	1880
The Right Hon Sir Jamesergusson, Bart, K C M G	1880
James Braithwaite Pelle, C S I ( <i>Acting</i> )	1885
Baron Reay	1885
Baron Harris	1890
Herbert Mills Birdwood, C S I ( <i>Acting</i> )	1895
Baron Sandhurst	1895
Baron Northcote, C B	1900
Sir James Monteath, K C S I ( <i>Acting</i> )	1903
Baron Lamington, G C M G, G C I E	1903
J W P Muir-Mackenzie, C S I ( <i>Acting</i> )	1907
Sir George Sydenham Clarke, G C M G, G C I E (c)	1907
Baron Willingdon, G C I E	1913
(a) Proceeded to Madras on duty in Aug, 1793, and then joined the Council of the Governor-General as Commander-in-Chief in India on the 28th Oct, 1793	
(b) Was appointed Governor of Bombay by the Honourable the Court of Directors on the 4th Aug, 1841, but, before he could take charge of his appointment, he was assassinated in Cabul on the 23rd Dec, 1841	
(c) Afterwards (by creation) Baron Sydenham	

# The Madras Presidency.

The Madras Presidency, officially the Presidency of Fort St. George together with the Native States, occupies the whole southern portion of the peninsula, and, excluding the Native States, has an area of 141,075 square miles. It has on the east, on the Bay of Bengal, a coast-line of about 1,200 miles, on the west, on the Indian Ocean, a coast-line of about 450 miles. In all this extent of coast, however, there is not a single natural harbour of any importance, the ports, with the exception of Madras, which has an artificial harbour are merely open roadsteads. A plateau, varying in height above sea level from about 1,000 to about 3,000 ft., and stretching northwards from the Nilgiri Hills, occupies the central area of the Presidency, on either side are the Eastern and the Western Ghats, which meet in the Nilgiris. The height of the western mountain-chain has an important effect on the rainfall. Where the chain is high, the intercepted rain-clouds give a heavy fall, which may amount to 150 inches, on the seaward side, but comparatively little rain falls on the landward side of the range. Where the chain is low, rain-clouds are not checked in their westward course. In the central tableland and on the east coast the rainfall is small and the heat in summer excessive. The rivers, which flow from west to east, in their earlier course drain rather than irrigate the country, but the deltas of the Godavari, Kistna and Cauvery are productive of fair crops even in time of drought and are the only portions of the east coast where agriculture is not dependent on a rainfall rarely exceeding 40 inches and apt to be untimely.

## Population.

The population of the Presidency in 1911 was 41,402,000 and that of the Native States was 4,813,000. Hindus account for 89 per cent, Mahomedans for 6, Christians for 3, and Animists for 2. The vast majority of the population is of Dravidian race, and the principal Dravidian languages, Tamil and Telugu, are spoken by 15 and 14 million persons, respectively. Of every 1,000 people, 407 speak Tamil, 377 speak Telugu, 74 Malayalam, 37 Canarese and 23 Hindustani. It is remarkable that of the 41 millions of population all but quarter of a million belong to it by birth.

## Agriculture

About 68 per cent of the population is occupied in Agriculture. About 40 per cent having a direct interest as land-owners or tenants. About 86 per cent of the cultivated acre is under food crops, the principal being rice (10.7 million acres), cholam or great millet (5.8 million acres), spiked millet (3.3 million acres) and ragi or millet (2.0 million acres). 24,023 acres are under wheat, 3,079 acres are under barley. About 3.2 million acres are under oil seeds, about 2.7 million acres are under cotton, 26,822 acres are under tea and 43,522 acres are under coffee. Irrigation is unnecessary on the West Coast but on the East about 30.5 per cent of the cultivated area has ordinarily to be irrigated. Irrigation works include 28,890 tanks, 6,164 river channels, 6,114 spring channels, 1,391 acicuts, 391,659 ayakut wells and 215,736 supplemental wells. The

recent progress of the application of machinery to irrigation on a small scale has been remarkable.

## Industries

Comparative poverty in readily exploitable mineral wealth and the difficulty of coal supply prohibit very large industrial development in the Presidency, but excellent work, both in reviving decadent industries and testing new ones, has been done under Government auspices. The only indigenous art employing a considerable number of workers is weaving. There is no system of regular registration in vogue, and the figures given can be regarded only as approximate, but returns show a total of 1,231 factories driven by engines of an aggregate H.P. of 33,417. Of these factories 170 are concerned with cotton.

## Trade

The grand total of sea-borne trade of the Madras Presidency in 1914-15 was Rs. 88,15,00,000, a decrease of some 16 per cent owing to war conditions. It would be misleading to cite the year-figures in detail since they were abnormal, the average for the 5 years ending 1910-11 was Rs. 4,01,10,000. The following items in the 1914-15 returns may be mentioned—Exports decreased by 10 per cent in Indian produce and by 26 per cent in foreign goods re-exported. Imports decreased by 23 per cent under the heading merchandise. In the last normal year, about 63 per cent of the trade of the Presidency was with the British Empire and about 42 per cent with the United Kingdom. The port of Madras accounted for 41 per cent of the whole sea-borne trade of the Presidency.

## Education

The literate population numbers 3,130,000 in every 1,000, 138 men and 13 women can read and write. Of every 1,000 persons, 6 are literate in English but the total number of women literate in English is only 4,000. There were in 1913-1914, twenty-nine Art Colleges, five Oriental Colleges, three Professional Colleges, 364 Secondary Schools and 26,018 Elementary Schools for males, for females there were two Arts Colleges, 69 Secondary Schools and 1,443 Elementary Schools. In addition to these, all of which were public institutions, there were 368 advanced and 4,224 elementary private institutions for male scholars and 122 for females. The total number of scholars in educational institutions of all kinds was 1,460,945 including 7,094 students in Art and Oriental Colleges, 986 in Professional Colleges, 128,157 in Secondary Schools and 1,200,249 in Elementary schools. The Madras University produces each year about 600 graduates in Arts.

## Government.

The Madras Presidency is governed on a system generally similar to that obtaining in Bombay and Bengal. At the head is the Governor usually selected from the ranks of British public men or of ex-Governors of Colonies, with the Governor is associated an Executive Council of three members, two of

B. A. Alvar Nara Inha Alvar  
K. P. Jagan Menon  
A. K. Alingar Imanujachariyar •  
Krishna Sankar Rama Alingar  
K. K. Ankata Krishna Rao Panikulu  
Durgam Babadur Venkataswami Ramabhadra  
Nayidu Gattu  
C. A. Surya Narasinha Raju  
K. Chittambaramalla Mudaliyar  
K. K. Banaji Kavilappara Muppil Navar  
T. Zaki ul abidin Sahib Shifa ul Muluk  
Ahmad Taimi Ghulam Muhiuddin Marakkayar  
J. O. Krishnan  
Sir Huch Stein Fraser  
F. L. Butler

*Yoruba* *g'ede*

I. H. M. Corbett  
 N. S. Poffe  
 J. Davidson, C.S.I.  
 J. E. Puckey  
 T. H. Stone  
 R. B. Coe  
 S. B. Murray  
 Coln. J. William Montague Ellis, R.E.  
 A. Luffertworth  
 Surg. Gen. W. B. Rannerman, C.S.I., M.D., I.M.S.  
 James Pouch Bedford  
 H. J. W. Gillman  
 C. J. M. Schmidt  
 Dewan Bahadur J. D. Swamikannu Pillai  
 Hajj Imael Salt, Khan Bahadur

St. J. Spring K.C. 11

P. Somasundari Chettivar

8. *Schulvassa Sastri*

A. Multibody cell

Raj, Sri M. M. Sinha De v

Charles George Ledhunter

ACCEPTANCE TO GOVERNMENT

Chief Secretary to Government A. Butterworth  
108

Jerome, I David on C-1, I C-8

Local and Municipal Education and Legislation. James Perch Bedford

Public Works (General) Col W M Ellis, b 1

Joint Secretary, S B Murray

## BOARD OF REVENUE

Just Member, R B Clegg

Second Member, R C C Carr 1 c -

Third Member, N. S. Brodie, M. A.

Fourth Member, L. I. Buckley

MONITORING AND EVALUATION

Commissioner of Revenue Settlement, etc., L. 1  
Buckley, I.C.E.

Revenue Survey Department, Director, D. C.  
Hatchell.

Director of Public Instruction, J. H. Stone, C I F  
(17)

Vice Chancellor of Madras University—Justice  
Sir John Wallis

Registrar of Madras University, F. Dewsbury.

<i>Inspector-General of Police</i> , P L Moore C I I , I C S	Major General William McIwys	1700
<i>Surgeon-General</i> , Surgeon-General W B Bannerman, C S I	Sir Charles Oakley, Bart	1702
<i>Accountant-General</i> , Krishna Lal Dutta, M A	Lord Hobart	1704
<i>Inspector-General of Prisons</i> , Lt Col R T Macnamara, I M S	Major-General George Harris (Acting)	1705
<i>Postmaster-General</i> , H. C Sheridan	Lord Clive	1709
<i>Collector of Customs</i> , J J Cotton, I C S	Lord William Cavendish Bentinck	1807
<i>Commissioner of Salt</i> , Abhari, etc., A S Brodie	William Petrie (Acting)	1807
<i>Inspector-General of Registration</i> , C R M Schmidt	Sir George Hillaro Barlow, Bart., K C B	1807
<i>President, Madras Corporation</i> P I Moore, C I L.	Lieut.-General the Hon John Aber- cromby.	1813
<i>Director of the Kodaikanal and Madras Obser- vatories</i> , J. Evershed	The Right Hon Hugh Elliot	1814
<i>Supt., Govt Central Museum, and Principal Librarian, Connemara Public Library</i> , J R Henderson	Major-General Sir Thomas Munro, Bart., K C B	1820
<i>Piscicultural Expert</i> , H C Wilson	Died, 6 July, 1827	
<i>Persian and Hindustani Translator to Govern- ment</i> , Major A R Nethersole, I A	Henry Sullivan (Acting)	1827
<i>Registrar of Co-operative Credit Societies</i> , L D Swamikannu Pillai, Diwan Bahadur	Stephen Rumbold Lushington	1827
<i>Scientific Officer for Planting Industries of S India</i> , R D Anstead	Lieut.-General Sir Frederick Adam, K C B	1832
<i>Consulting Architect</i> , W H Nicholls	George Edward Russell (Acting)	1837
	Lord Phippstone, G C H, P C	1837
	Lieut.-General the Marquess of Tweed- dale, K T, C B	1842
	Henry Dickinson (Acting)	1848
	Major-General the Right Hon Sir Henry Pottinger, Bart., G C B	1848
	Daniel Elliot (Acting)	1854
	Lord Harris	1854
	Sir Charles Edward Trevelyan, K C B	1859
	William Ambrose Morehead (Acting)	1860
	Sir Henry George Ward, G C M G	1860
	Died at Madras, 2 August 1860	
	William Ambrose Morehead, (Acting)	1860
	Sir William Thomas Denison, K C B	1861
	Acting Viceroy, 1863 to 1861	
	Edward Maltby (Acting)	1863
	Lord Napier of Merchistoun, K T (a)	1866
	Acting Viceroy	
	Alexander John Arbuthnot, C S I (Acting)	1872
	Lord Hobart	1872
	Died at Madras, 27 April, 1875	
	William Rose Robinson, C S I (Acting)	1875
	The Duke of Buckingham and Chandos	1875
	The Right Hon W P Adam	1880
	Died at Ootacamund, 24 May, 1881	
	William Huddleston (Acting)	1881
	The Right Hon M L Grant Duff	1881
	The Right Hon Robert Bourke, P C	1886
	Lord Connemara, 12 May, 1887 (by crea- tion)	
	John Henry Garstin, C S I (Acting)	189
	Baron Wenlock	189
	Sir Arthur Ellbank Havelock, G C M G	18
	Baron Amptill	10
	Acting Viceroy and Governor-General	1904
	James Thomson, C S I (Acting)	1904
	Gabriel Stokes, C S I (Acting)	1906
	Hon Sir Arthur Lawley, K C M G, G C I F	1906
	Sir Thomas David Gibson-Carmichael,	1911
	Bart., K C M G, G C I F (b)	
	Became Governor of Bengal, 1 April, 1912	
	Sir Murray Hammett, K C S I, C I E	1912
	(Acting)	
	Right Hon Baron Pentland P C, G C I F	1912
	(a) Afterwards (by creation) Baron Napier of Ettrick	
	(b) Afterwards (by creation) Baron Carmi- chael of Skirling	

### Presidents and Governors of Fort St. George in Madras

William Gyfford	1684
Ellhu Yale	1687
Nathaniel Higginson	1692
Thomas Pitt	1698
Gulston Addison	1709
Died at Madras, 17 Oct., 1709	
Edmund Montague (Acting)	1709
William Fraser (Acting)	1709
Edward Harrison	1710
Joseph Collet	1711
Francis Hastings (Acting)	1727
Nathaniel Elwick	1727
James Macrae	1725
George Morton Pitt	1730
Richard Benyon	1735
Nicholas Morse	1744
John Hinde	
Charles Floyer	1747
Thomas Saunders	1750
George Pigot	1755
Robert Palk	1763
Charles Boucher	1767
Josias DuPre	1770
Alexander Wynch	1773
Lord Pigot (Suspended)	1775
George Stratton	1776
John Whitehill (Acting)	1777
Sir Thomas Rumbold, Bart	1778
John Whitehill (Acting)	1780
Charles Smith (Acting)	1780
Lord Macartney, K.B	1781
Lord Macartney, K.B	1785
Alexander Davidson (Acting)	1785
Major-General Sir Archibald Campbell, K.B	1786
John Holland (Acting)	1789
Edward J Holland (Acting)	1790

# The Bengal Presidency.

The Presidency of Bengal, as constituted on the 1st April 1912, comprises the Burdwan and Presidency divisions and the district of Darjeeling, which were formerly administered by the Lieutenant-Governor of Bengal, and the Rajshahi, Dacca and Chittagong divisions which by the partition of the old Province had been placed under the administration of the Lieutenant-Governor of Eastern Bengal and Assam. The area of the Presidency is 84,092 square miles, and it possesses a population of 46,305,642 persons, included within this area are the two Native States of Cooch Behar and Hill Tippera, which are under the general supervision of the Government of Bengal. The area of the British territory is 78,699 square miles. Bengal comprises the lower valleys and deltas of the Ganges and Brahmaputra, and in the main consists of a great alluvial plain intersected in its southern portion by innumerable waterways. In the north are the Himalayan mountain and submontane tracts of Darjeeling and Jalpaiguri, and on the south-east the hills in Hill Tippera and Chittagong, while on the west the Chota Nagpur plateau is continued by an undulating tract running through the western portions of Midnapur, Bankura, Burdwan and Birbhum. The general range of the country however is very low, and a great fertile plain extends southward from Jalpaiguri to the forests and swamps known as the Sunderbans, which lie between the area of cultivation and the Bay of Bengal.

## The People

Of the inhabitants of the Presidency 24,237,238 or 52.4 per cent are Mahomedans and 20,945,379 Hindus. These two major religions embrace all but 2.4 per cent of the population. Christians, Buddhists, and Animists combined number a little over 1,100,000.

Bengali is spoken by ninety-two per cent of the population of the Presidency and Hindi and Urdu by four per cent. The Oriya speaking people number nearly 300,000 and Naipali is the tongue of 89,000 persons principally residents in the Darjeeling and Jalpaiguri districts. The great majority of the speakers of the Munda languages are Santals in West and North Bengal.

## Industries

According to the returns of the Census of 1911 nearly 35½ million persons or three-fourths of the population derive their support from pasture and agriculture, and of these 30 millions are cultivators, and 3½ millions farm servants and field labourers. The area under jute in 1915 is estimated at 2,086,270 against 2,872,604 in 1914. In some parts of Eastern Bengal this fibre was considerably damaged by floods. Bengal is the most important rice producing area in Northern India and it is computed that 84 per cent of the cultivated area of the Presidency is devoted to its production. Other crops include barley, wheat, pulses, and oil-seeds, the area devoted to the last named being over 2 million acres. Sugar is produced both from the sugar-cane and from the date palm, and tobacco is grown for local consumption in nearly every district of Bengal. The area under tea in 1914-15 was 159,054 acres. There were 297 plantations employing a daily average of 100,598 permanent and 29,840 temporary hands.

## Manufactures and Trade

The jute mills of Calcutta constitute the principal manufacturing industry of the Presidency. During 1914-15 sixty-seven working mills employed daily on an average 236,294 persons. The war closed a large central market for the raw material but the Calcutta mills have done very well, sustained as they were by a plentiful supply of cheap material. The net profits earned by them amounted to Rs 1.02 crores as compared with Rs 2.68 crores in 1913-14. The nominal rupee capital employed was Rs 8.57 crores of which Rs 7.93 was paid up capital. Up to the declaration of war the volume of the trade in jute exports was large and the aggregate value rose to Rs 12.97 crores an increase of 11.12 per cent. The total value for the year however fell by 33 per cent. In particular, exports of raw jute declined in value by over 57 per cent the lowest since 1904-05. The net collections realised from the Jute cess for the Calcutta Improvement Trust amounted to Rs 7.90 lakhs in 1914 and Rs 3.31 lakhs for the first three months of 1915. The jute trade represented 52.87 per cent of the total value of the exports of merchandise from Calcutta. Other principal industries are cotton twist and yarn, silk yarn and cloth, hand-made cloth, sugar, molasses and paper. Fifteen cotton mills were at work during 1914-15 employing daily on an average 10,349 persons. The silk weaving industry is in a declining state. There was only one silk factory working during 1914-15 which employed 73 hands. The manufacture of tea is carried on an extensive scale in Darjeeling and Jalpaiguri. In 1914-15 the maritime trade of Bengal reached a total of Rs 161.96 crores. The foreign trade amounted to Rs 138.06 crores the lowest since 1909-10 of which Rs 62.66 crores represented imports and Rs 75.39 crores exports, 96.88 per cent of the foreign trade passed through the Port of Calcutta and the rest through Chittagong. With the readjustment of the boundaries of Bengal and the creation of a new Province of Bihar and Orissa in 1912, the more important coal-fields have passed into the new Province. The number of coal-mines worked in 1914-15 was 178. The total output was 4,424,540 tons against 4,649,852 tons raised in 1913-14. The decrease was due to a falling off in the demand for industrial purposes owing to the war. The daily average or person-employed in the mines was 38,879 and there was a notable advance in the use of electricity. Three paper mills produced paper valued at over Rs 65 lakhs.

## Administration

The present form of Government dates from the 1st of April 1912, when the administrative changes announced by the King-Emperor at Delhi in December 1911 came into operation. A Governor was then substituted for a Lieutenant-Governor, who had previously been at the head of the Province, and Lord Carmichael of Skirling assumed charge of the office. The Governor is assisted by an Executive Council, two of whom are at present members of the Indian Civil Service and the third an Indian. The



Civil Secretariat consists of the Chief Secretary, who is in charge of the Political Appointment and Judicial Departments, the Revenue Secretary, the Financial Secretary, who also deals with Commercial questions, the General Secretary who deals with questions of Local Self Government and Education and the Legislative Secretary, four Under-Secretaries and one Assistant Secretary. The Government divides its time between Calcutta, Darjeeling and Dacca.

Bengal is administered by five Commissioners under the Governor in Council, the divisions being those of the Presidency, Burdwan, Rajshahi, Dacca and Chittagong. The unit of administration is the District Magistrate and Collector. As Collector he supervises the gathering of the revenue and is the head of all the Departments connected with it, while as District Magistrate he is responsible for the administration of Criminal Justice in the district. The immediate superior of the District Magistrate is the Divisional Commissioner. Commissioners are the channels of communication between the local officers and the Government. In certain revenue matters they are, in their turn, subject to the Board of Revenue in Calcutta, in other matters they are under the direct control of Government.

### Justice

The administration of justice is entrusted to the High Court of Calcutta which consists of the Chief Justice who is a barrister and 18 puisne judges who are barristers, civilians or vakils. Below the High Court are the District and Additional Judges, the Small Cause Court and Subordinate Judges and the Munsifs. Of these officers the District and Additional Judges and a certain number of subordinate judges are also endowed with the power of a Criminal Court while the remainder have jurisdiction in Civil matters only. Criminal justice is administered by the High Court, the Courts of Session and the courts of the various classes of magistrates. On its appellate side the High Court disposes of appeals from the order of a Court of Session, and it also confirms, modifies or annuls sentences of death passed by Sessions Courts. Calcutta has four Presidency Magistrates, one Municipal Magistrate and also a number of Honorary Magistrates and it possesses a Court of Small Causes with six judges who dispose of cases of the class that are usually heard in County Courts in England.

### Local Government.

By the Bengal Act of 1884 which regulates municipal bodies in the interior and its subsequent amendments the powers of Commissioners of municipalities have been increased, and the elective franchise has been extended. Municipal expenditure now comprises a large number of objects, including veterinary institutions and the training and employment of female medical practitioners. The Commissioners also have large powers in regard to the water-supply and the regulation of buildings. In Calcutta Act (III) of 1899 created three coordinate municipal authorities, the Corporation, the General Committee, and the Chairman. The total number of Commissioners is fifty, of whom 25 are elected, and the remainder appointed by Government and by commercial bodies. In order to improve the insanitary and congested

areas of the city, the Calcutta Improvement Trust has been created with extensive powers. In the mofussil, District and Local Boards exercise considerable powers, with regard to Public Works, Education and Medical relief and Union Committees have been formed which deal for the most part with the control of village roads, sanitation and water supply.

### Finance

As in other Provinces, the revenue is divided between the Local Government and the Government of India. The Budget for 1915-16 shows an opening balance of Rs. 2.81 crores, estimated revenue amounted to Rs. 6.18 crores and expenditure aggregated Rs. 6.55 crores. Of the closing balance of Rs. 211 lakhs, Rs. 220 lakhs was earmarked for various objects.

### Public Works

The Public Works Department is at present under the charge of a Chief Engineer and a temporary Chief Engineer whose appointment has been sanctioned for five years. The redistribution of territories on 1st April 1911 caused considerable change in this Department and almost all the irrigation works in the province of Bengal as well as two out of three Canal Revenue Divisions went to the Province of Bihar and Orissa. There was also considerable reduction in the staff and in the number of Public Works Circles and Divisional Public buildings are erected by the Department which also constructs roads and carries out miscellaneous improvements. Irrigation works in Bengal are under the charge of the Irrigation Department which deals with the numerous waterways that intersect the Province.

### Police

The Bengal Police force comprises the Military Police, the District Police, the Railway Police, and the River Police. The District Police are under the control of the Inspector General of Police who is usually a Covenanted Civilian, although the office is open to gazetted members of the force. Under him are Deputy Inspectors General for the Dacca Range, the Rajshahi Range, the Presidency Range, and the Burdwan Range, and also a Deputy Inspector General in charge of the C.I.D., the Railway and River Police. Each district is in charge of a Superintendent, and several of the more important districts have an Additional Superintendent. The cadre comprises Assistant Superintendents, Deputy Superintendents, Inspectors, Sub-Inspectors, head constables and constables. There is also a Village Police, composed of daddars, and chowkidars, who receive monthly salary which is collected from the villages by the Panchayat. The Calcutta City Police is a separate force maintained by Government under a Commissioner who is responsible direct to Government. The Commissioner has under him Deputy Commissioners, Inspectors, Sub-Inspectors, head constables, constables, and a reserve force of about 100 European sergeants. A school for the training of recruits for the Calcutta Police force has recently been established at Calcutta. There is a training college and school at Surda, in the district of Rajshahi where newly appointed gazetted officers, Sub-Inspectors and constables learn their duties. There is another school at Dacca for the training of constables. The annual cost of the Police is nearly Rs. 100 lakhs.

**Medical**

**Medical**  
The head of the Medical Department is the Surgeon General with the Government of Bengal, and Sanitation is in charge of the Sanitary Commissioner, both these officials being members of the Indian Medical Service. There is also a Sanitary Engineer for the Presidency in the districts the Civil Surgeons are responsible for medical work. There are 20 hospitals in Calcutta 9 of which are supported by the Government and 388,677 persons are treated at these institutions annually, of whom nearly 33,427 are in-patients. In the mofussil districts there are several hundred hospitals and dispensaries, the number of patients treated annually in the Province were 5,571,324 including 60,605 in-patients.

**Education**

Education

In the Presidency of Bengal education is imparted partly through Government agencies and partly through private bodies, assisted in large measure by Government grant-in-aid. Government maintains three Arts Colleges in Calcutta (of which one is a college for women and one the Sanskrit College), one at Huenli, one at Krishnagar, one at Dacca, one at Rajshahi and one at Chittagong. It also maintains two training colleges, one at Calcutta and one at Dacca for teachers who teach in secondary schools through the medium of English and normal schools, one in each division, for the training of teachers in secondary schools through the medium of the vernacular, also an engineering college at Sibpur and an engineering school at Dacca, a medical college, a veterinary college, a school of art and a commercial school in Calcutta and a weaving school at Serampore. It also provides, at the headquarters of all districts, except Burdwan and Midnapore, and also at certain other important centres, high English schools for the education of boys, while to each Government Arts College a high school is attached. In Calcutta there are three high schools for boys, two of which are attached to Presidency College and one to the Sanskrit College. Government high schools for girls exist only in the headquarters and Chittagong. The other secondary schools, with the exception of a few middle schools, are under either by Government or by boards, are under private control. The administration of primary education in all areas which are not under municipal or district boards, which are not under municipal or district boards, is being given from provincial revenue grants to the boards which contribute only slightly from their own funds. Owing to the fact that in such schools either either wards and localities are such schools either either managed, or directly aided, by Government. Apart from the Institute of Oriental Studies, 115 institutions called Gurukul are maintained by the Department for the training of Mahomedan scholars for the education of Calcutta, Dacca, Chittagong, and Madras at Calcutta. These Gurukul institutions, which are managed by Government, have no right to receive any aid from the Government. The proportion of educational work of the Government is under the control of the Government bodies which are aided by Government grant-in-aid.

Presidency.

The municipalities are required to expend a certain proportion of their ordinary income on education. They are mainly responsible for primary education within their jurisdiction but schools in these areas are eligible also for grants from Government. These bodies maintain a second grade Arts College and a high school at Midnapore, a high school at Burdwan, a high school at Santipur and a high school at Culittazong.

— in the Presidency —

There are now in the Presidency --

Arts Colleges	10
Law	1
Medical College	1
Engineering College	2,557
Training Colleges	3,002
Secondary Schools	3,728
Primary Schools	2,274
Special	
Private Institutions	

with 792,880 pupils in all

The Government Educational Budget allocated for 1944-1945 is Rs. 1454:000. Of this a large proportion represents the grants recently allotted by the Government of India.

[illegible]

Cuttack College, Principal, J R Barrow  
 Sanskrit College, Principal, Dr S C Acharya  
 Hughli College, Principal, J Bottomley  
 Krishnagar College, Principal, S C Day  
 Bethune College, Calcutta, Lady Principal  
 Miss S Ghosh

#### PRIVATE ARTS COLLEGES *Aided*

Scottish Churches College, Calcutta, Principal  
 Rev J Watt  
 St Xavier's College, Calcutta Rector, Rev  
 Father Crohan  
 L M S College, Bhowanipore (Calcutta),  
 Principal, Rev A Sims  
 Jagannath College, Dacca, Principal, R L M  
 Chatterji Bahadur  
 Brijamohan College, Barisal, Principal, N L  
 Mookherjee  
 Anandamohan College, Mymensingh, Principal  
 Dr J Ghosh  
 Victoria College, Comilla, Principal Satendra  
 Nath Basu  
 Wesleyan College Bunkura, Principal Rev J  
 Mitchell  
 Victoria College, Narail, Principal Gopal  
 Chandra Maltra  
 Hindu Academy, Daulatpur, Principal Kama  
 Khracharan Nag  
 Scrimpore College, Principal, Dr George Howell  
 St Paul's Cathedral Mission College Calcutta  
 Principal, W S Holland  
 Edward College, Patna, Principal R Bose  
 Diocesan College, Calcutta, Lady Principal  
 Sister Mary Victoria  
 City College Calcutta, Principal Haramba  
 Chandra Maltra  
 Ripon College, Calcutta, Principal, Ramendra  
 Sundar Trevedi  
 Bangabasi College, Calcutta, Principal G C  
 Bose  
 Metropolitan Institution, Calcutta, Principal,  
 Saradaranjan Roy  
 Bishop's College, Calcutta, Principal, Rev R  
 Gee  
 Central College, Calcutta, Principal, Khudiram  
 Bose  
 Krishna Chandra College, Hetampur, Principal,  
 Dhurumdas Dutt  
 Burdwan Raj College, Principal Umacharan  
 Bandopadhyaya  
 Uttarpara College, Principal, Jogendra Nath  
 Mitra  
 Krishna College, Berhampore, Principal, S  
 Banerji (offg)  
 Loreto House, Calcutta, Lady Principal, Mother  
 Gonzaga

#### MUNICIPAL

Midnapore College, Principal, Jogendra Nath  
 Hazra

#### COLLEGES FOR PROFESSIONAL TRAINING

##### *Engineering—Government*

Mill Engineering College, Sibpur Principal,  
 B Hutton

##### *Teaching—Government*

David Hare Training College, Principal, W L  
 Griffith

Dacca Training College, Principal L F Bliss  
*Aided*

L M S Training College Bhowanipore (Cal  
 cutta), Rev. A Sims

##### *Medicine—Government*

Medical College, Calcutta Principal Lt Col  
 J T Calvert

##### *Law*

Jayanti Law College, Calcutta Principal,  
 Dr Sanyal

The Law Department, attached to the Dacca  
 College, Vice-Principal, Munazzam Ali

The Law Department, attached to the Ripon  
 College, Calcutta, Principal, Jankinath Bhat  
 tacherji

There are also Bader-ship classes attached  
 to the Government Colleges at Dacca, Rajshahi  
 Hooghly, Chittagong and Krishnagar and in the  
 aided college at Bhowanipore, the Ripon  
 College and the Metropolitan Institution  
 Calcutta, and the Municipal College at Midna  
 pore

#### Administration

##### GOVERNOR AND PRESIDENT IN COUNCIL

His Excellency The Rt Hon Thomas David,  
 Baron Carmichael of Skirling G C I R, F C M G  
 Took his seat, 1st April, 1912

##### PRISONAL STAFF

*Private Secretary*, W R Gourlay

*Military Secretary*, Capt Henry George Vaux  
 Surgeon, Capt W L Harnett, I M S

*Aides-de Camp*, Capt W P Orock, Middlesex  
 Regiment, 2nd Lt Duncan Balfour, Lothian  
 and Border Horse

*Honorary Aides-de-Camp* Lieut-Col C M  
 Pearce, I D, Commander E A Constable,  
 R A, Lt-Col R Glen, I D, Hon Col  
 C Routh, Lt-Col R S Hawkins, I D Com-  
 mander Duncan Frederick Vines, R I M,  
 Lt Col D A Tyrie, I D

*Extra Aide-de-Camp*, Lt J. L Mercer, 5th  
 Battalion (Queen's Royal West Surrey Regt)

*Indian Aide-de-Camp*, Risaldar Ismail, Khan  
 Bahadur

*Commander of Body Guard*, Lt H A Garston,  
 21st Cavalry

##### BENGAL EXECUTIVE COUNCIL

N D Beatson Bell Took his seat, November  
 1914

P C Lyon C S I Took his seat, 1st April 1912.

Syed Shams ul Huda Took his seat, 1st April  
 1912

##### LEGISLATIVE COUNCIL OF BENGAL

##### *Councillors, Ex-Officio*

N D Beatson Bell

Mr. P C Lyon, C S I, I C S

Nawab Syed Shams-ul-Huda

## Appointed Officials

Mr J. A. Donald  
 F. T. Monahan  
 J. A. A. Cowle  
 I. H. Kerr, C.I.F.  
 Kiran Chandra D. C.I.F.  
 C. H. Ramdas  
 I. B. A., C.I.F.  
 Col W. I. Edwards, C.B. I.M.S.  
 Mr F. B. Newbould  
 B. K. I. Chandra Mitra  
 W. W. Hornell  
 P. N. Prasad Nath Mukharji Bahadur  
 Mr C. F. Payne  
 Non-attached Non-official  
 Nawab Sir Asif Qudr Sayid Wasfi Ali Mitra  
 Khan Bahadur, K.C.I.O. of Murshidabad  
 Mr H. J. Hilary  
 Sateendran Prasananna Sinha  
 Dr Nilmatan Sarkar  
 Raja Hrishikesh Lahiri, C.I.F.  
 Lt-Col P. Glen

## Fleeted

Mr Bromkes Chakravarti  
 Sir Bijay Chand Mahtab  
 Maharaja Jagadindra Nath Ray  
 Raja Sohil Kanta Acharyya Chaudhuri Bahadur  
 Dr Deba Prasad Sarbadhikari  
 Maulvi Muhammad Ismail Khan Chaudhuri  
 Rai Radhacharan Pal Bahadur  
 Mr I. W. H. Hugh Bray  
 Archibald Blakemore  
 W. T. Grace  
 G. A. Bayley  
 A. W. Cresswell Chaplin  
 Gohar Hossain Cassim Ariff  
 Munsif Mazharul Anwar Chaudhuri  
 Maulvi Musharrat Hussain  
 Maulvi Abdul Kasem Fazl ul-Haq  
 Nawab Sayid Hossain Haider Chaudhuri  
 Khan Bahadur  
 Maharaja Pangjit Singh of Nashipur  
 Rai Nalinakshi Basu Bahadur  
 Raja Mahendra Ranjan Ray Bahadur  
 Nawab Sayid Nawab Ali Chaudhuri Khan  
 Bahadur  
 Babu Prasanna Kumar Roy  
 Babu Surendra Nath Banarji  
 Babu Surendra Nath Roy  
 Babu Mohendra Nath Ray  
 Rai Hari Mohan Chandra Bahadur  
 Babu Upendra Lal Ray

## SECRETARIAT

Chief Secretary to Government, T. G. Cumming,  
 C.I.F.  
 Secretary, Revenue Department, I. H. Kerr, C.I.F.  
 Secretary, General Department, H. F. Samman  
 Secretary, Special Department, H. L. Stephenson  
 Secretary, Judicial Department, E. P. Chapman  
 Secretary to the Council and Secretary, Legislative  
 Department, A. W. Watson

Secretary to Government Public Works Department, and Chief Engineer, H. H. Green  
 Under Secretary to Government, Public Works Department (Irrigation Branch), Anadi Nath Mitra

## BOARD OF REVENUE

Member, D. J. Macpherson, C.I.F.  
 Secretary, W. A. Marr  
 MISCELLANEOUS APPOINTMENTS  
 Director of Public Instruction, W. W. Hornell  
 Principal, School of Arts, P. Brown  
 Inspector General of Police, R. B. Hughes  
 Buller, C.I.E.  
 Commissioner, Calcutta Police, Reginald Clarke  
 (Offg)  
 Conservator of Forests, C. L. Muriel  
 Inspector-General of Civil Hospitals, Col G. F. Harris, C.I.I.  
 Sanitary Commissioner Major W. W. Clemesha  
 Deputy Sanitary Commissioner for Malaria Research, Major A. B. Fry  
 Collector of Customs, Calcutta, F. G. I. L.  
 McGregor, I.C.S.  
 Commissioner of Excise and Salt, A. N. Moherly  
 Accountant General, H. G. Tomblins, C.I.F.  
 Inspector-General of Prisons, Lt-Col W. J. Luchman, C.I.F.  
 Postmaster General, P. G. Rogers, I.C.S.  
 Inspector General of Registration, P. N. Mukharji  
 Director of Agriculture, I. R. Blackwood  
 Protector of Emigrants, C. Banks, M.D.  
 Chairman of Calcutta Corporation, C. F. Payne  
 Superintendent, Royal Botanic Gardens, Major A. T. Gage  
 Coroner, F. K. Dobbin  
 Registrar of Co-operative Credit Societies, I. M. Mitra

## LIEUTENANT GOVERNORS OF BENGAL

Frederick J. Halliday	1854
John P. Grant	1859
Cecil Bordon	1862
William Grey	1867
George Campbell	1871
Sir Richard Temple Bart, K.C.S.I.	1874
The Hon. Ashley Eden, C.S.I.	1877
Sir Stuart C. Bayley, K.C.S.I. (Offg.)	1879
A. Rivers Thompson, C.S.I., C.I.E.	1882
H. A. Cockerell, C.S.I. (officiating)	1885
Sir Stuart C. Bayley, K.C.S.I., C.I.F.	1887
Sir Charles Alfred Elliott, K.C.S.I.	1890
Sir A. P. MacDonnell, K.C.S.I. (Offg.)	1897
Sir Alexander Mackenzie, K.C.S.I.	1897
Retired 6th April 1898	
Charles Cecil Stevens, C.S.I. (Officiating)	1897
Sir John Woodburn, K.C.S.I.	1898
Died 21st Nov 1902	
T. A. Bourdillon, C.S.I. (Officiating)	1902
Sir A. H. Leith Fraser, K.C.S.I.	1903
Lancelot Hare, C.S.I., C.I.F. (Offg.)	1906
F. A. Slacke (Officiating)	1906
Sir E. N. Baker, K.C.S.I.	1908
Retired 21st Sept. 1911	
F. W. Duke, C.S.I. (Officiating)	1911

The office of Lieutenant-Governor of Bengal was abolished on April 1st 1912, when Bengal was raised to a Governorship.

GOVERNORS OF THE PRESIDENCY OF BENGAL

WILLIAM IN BENGAL

The Rt Hon. Baron Carnarvon, 1st, of 1912  
 Skirling, G.C.I.E., K.C.M.G.

# The United Provinces.

The United Provinces of Agra and Oudh lie in practically the centre of Upper India. They are bounded on the north by Tibet, on the north-east by Nepal, on the south and south-east by Bengal, on the south by two of the Chota Nagpur States of the Central India Agency and the Saugor District of the Central Provinces, and on the west by the States of Gwalior, Dholpur, Bharatpur, Sirmor, and Jubbah, and by the Punjab. Their total area amounts to 107,207 square miles, to which may be added the area of the two Native States of Tehri and Rampur, both of which lie within the United Provinces, 5,079 square miles and the newly created independent State of Benares with an area of 865 miles, giving a total of 112,346 square miles. The total population is 48,014,080, out of which Tehri and Rampur account for 832,030.

The Provinces, originally termed the North-Western Provinces and so amalgamated in 1877, receiving their present designation in 1902, include four distinct tracts of country: portions of the Himalayas, the sub-Himalayan tracts (the Kumaon), the great Gangetic plain and portions of the hill systems of Central India (Bundelkhand). The first two of these tracts are infertile and support a very sparse population and the Central Indian plateau is almost equally infertile, though better populated. The soil of the Gangetic plain, however, possesses an extreme fertility and here the density of population rises from 512 persons per square mile in the west, to 549 in the centre and 718 in the east, which gives the Provinces as a whole a greater population pressure on the soil than any other Provinces in India. In the south there are low rocky hills, broken spurs of the Vindhyan mountains, covered with stunted trees and jungle, and in the North the lower slopes of the Himalayas, clothed with dense forest, affording excellent big and small game shooting, and rising beyond in a tangled mass of ridges, ever higher and higher, until is reached the line of the eternal snows, but the greater part of the provinces consists of level plain, teeming with highly-cultivated fields and watered by four rivers—the Ganges, Jumna, Gogra and the Gumti.

## The People

The population is mainly Hindu, 85 per cent ranking as such whilst Mahomedans number 14 per cent, the total of all other religions being less than 0.6 per cent composed of Christians (Europeans and Indians), Jains, Aryas and Sikhs, the Aryas are the followers of the Arya Samaj sect, which obtains widely in the Punjab and has extended its influence to the United Provinces. The three main physical types are Dravidian, Aryan and Mongoloid, the latter being confined to the Himalayan and sub-Himalayan districts and the former to South Mirzapur and Bundelkhand, whilst the high-caste Aryans frequent the western Districts of the Province. Most of the people, however, show a mixed Arya-Dravidian origin. Three languages are spoken by the great majority of the people in the plains—Western Hindi, Eastern Hindi and Behari, Urdu, or Hindustani, is a

dialect of Western Hindi, though it contains a large admixture of Persian and Arabic words which makes it a *lingua franca*.

## Industries

The principal industry is agriculture, which supports no less than 71.7 of the population. The soils of the Provinces fall into three groups, the valley soils of the Himalayas, the main alluvium and the Central Indian alluvium, the chief characteristic soil of the Central Indian alluvium is the black soil, with a lighter variant, though here also there are light loams and gravel. The Himalayan soils are of local origin and vary with the nature of the rock from which they have been formed whilst the main alluvium soils are sand, clay and loam, the loam being, naturally, the most productive. The soil generally yields excellent crops of rice, millet, maize, linseed, cotton, wheat, sugarcane, pulses, barley and poppy, rice being grown mostly in low-lying, heavy clay. The greater part of the Provinces is highly cultivated, the rainfall varies from 30 to 60 inches in the Hills to 40 inches in the Benares and Gorakhpur Divisions, whilst the Agra Division receives about 25 to 30 inches annually only. Drought seriously affected Bundelkhand and the Agra Division, in the past, but improved drainage, and irrigation (a protective system of irrigation works exists and is being extended) have enabled a complete recovery to be made and the agricultural prosperity of the Provinces is now high, though it varies with the rainfall. The great scourge has been, and is, that of plague, which hampers the agriculturist severely, and in the Terai malaria still exacts a large toll. Land is held mostly on the ryotwari tenure in Bundelkhand and Kumaon, on zamindari tenure in Agra and taluqdari tenure in Oudh. The principal land owners in Oudh are the Taluqdars, some of whom own very large estates. The area held in taluqdari tenure amounts to 51 per cent of the total area in Oudh.

## Manufactures

The Provinces are not rich in minerals. Coal exists in Southern Mirzapur, iron and copper are found in the Himalayan Districts, and there were mines of importance there formerly, but increased difficulty of working them as veins became exhausted resulted in the closure of most of them. Gold is found in minute quantities by washing in some of the rivers in the Hills. Limestone is found in the Himalayas and stone is largely quarried in the Mirzapur District. Cotton is ginned and spun throughout the provinces, as a home industry, and weaving, by means of hand-looms, is carried on in most districts. In 1901 nearly a million persons were dependent on weaving, 140,000 on spinning and 136,000 on cleaning, pressing, and ginning, but during the last decade these industries have been on the decrease. The largest industry is in Azamgarh District, where there are 130,000 looms. Silk spinning is confined almost entirely to the district of Benares, where the famous *Kinkob* brocade is made. Em-

brothers is manufactured in Lucknow, where the notable work of silk on cotton or muslin is produced and in Benares, where gold and silver work on velvet silk crepe and sar-enee. The glass industry is important in some districts. Benares and Moradabad are noted for their lacquered brass work. porcelain is manufactured at Ghaipur, and other industries are those of paper-making (Lucknow) dyeing, leather-work and brewworks. The chief centre of European and Indian industry is Cawnpore which is situated in most advantageous position on the Ganges possesses tanneries cotton woollen jute and other mills which have a large and ever increasing output (the woollen mill is the largest in India). There are cotton factories at Allahabad (famous for its locks) Meerut and Bareilly Mirzapur (which produces also excellent carpets), Hardoi and Hathras have cotton mills. Excellent furniture is made at Bareilly, at Allahabad there are stone works at Rosa there is a very large English distillery with patent still and the provinces can claim six breweries, with an out turn of over a million cistons.

The largest trade centres are Cawnpore, Allahabad Mirzapur Benares, Lucknow Meerut, Allahabad Hathras, Muttra, Agra, Farkhabad, Moradabad Chandauli, Bareilly, Saharanpur, Muzaffarnagar Ghazabad Khurja Gorakhpur, Ghazipur Pilibhit and Shahjahanpur.

## Administration

The Provinces are administered by a Lieutenant-Governor, who is generally chosen from among the members of the Indian Civil Service who have served in the Province. The medium for the transaction of public business is the Secretariat, the Staff of which consists of five Secretaries and five Under-Secretaries. The Chief Secretary is in charge of the Revenue, Appointment, General Administration, Police, Educational and Sanitation Departments, whilst a third looks to the local Self Government, Financial, Municipal, Miscellaneous and Separate Revenue Departments. The other two Secretaries belong to the Public Works Department, and are also Chief Engineers, one of whom deals with Irrigation, and the other with Roads and Buildings. Government spends the cold weather, October to April in Lucknow and Allahabad, mostly in Lucknow. The Secretariat moves between these two places. The Lieutenant-Governor and the Secretariat spend the hot weather in Naini Tal, but during the monsoon the Lieutenant-Governor tours the plains as he does also in the highest court of appeal in revenue and rent cases, and it has important executive duties, being the chief revenue authority in the Provinces. There are forty-eight British districts, thirty six in Agra and twelve in Oudh, average area 2,000 square miles and average population a million. Each District is in charge of a District Officer, a Deputy Collector and Magistrate in Oudh and a Commissioner and Magistrate in the Districts of Kumaon, who is an Indian Civilian. The Districts are grouped together in Divisions, having an average area of nearly 12,000 square miles and a population of from 5 to 6 millions.

The Districts are sub-divided into *tahsils*, of which there are 217 with an average area of 500 square miles and a population of 220,000. Each *Tahsil* is in charge of a *Tahsildar*, who is responsible for the collection of revenue, and also exercises judicial powers. *Tahsils* are divided into *parganas* which are units of importance in the settlement of land revenue. Subordinate to the *Tahsildars* are *lanungos*, of whom there are, on an average, three to a *tahsil*. These officials supervise the work of the *pattamis* or village accountants, check their papers and form a link direct between the village and Government. For judicial purposes (revenue and criminal), the District Officer assigns a subdivision consisting of one or more *tahsils*, as the case may be to each of his subordinates, who may be covenanted civilians, (Joint and Assistant Magistrates and Collectors) or members of the Provincial Service (Deputy Collectors and Magistrates). The Commissioner of the Bareilly and Kumaon Divisions are Political Agents for the Native States of Rampur and Tehri respectively and the Commissioner of Benares is the Political Agent for Benares State.

## Justice

Justice is administered by the High Court in the Province of Agra, and the Court of the Judicial Commissioner, in Oudh which are the final appellate authorities in both criminal and civil cases. The former, which consists of a Chief Justice and five puisne Judges, two of whom are Indian, sits at Allahabad and the latter represented by a Judicial Commissioner and two Additional Commissioners, one of whom is an Indian, sits always in Lucknow. There are twenty-seven District and Additional District Judges, (Indian Civilian) twenty-one in Agra and six in Oudh, who have both original and appellate jurisdiction in civil and criminal cases, and occasional appellate jurisdiction in rent cases, but District Officers and their assistants, including *Tahsildars*, preside in both criminal and rent and revenue courts and dispose of a good deal of the work. In Kumaon, the Commissioner is a High Court Judge in Civil cases and a District Judge in Criminal cases. In the larger Cantonments, the Cantonment Magistrates have limited powers as Judges of a Small Cause Court. There are also Subordinate Judges who dispose of a large number of small civil suits being specially empowered, in some cases, to decide suits up to Rs 2,000, but generally they take cases up to Rs 1,000, whilst Subordinate Judges hear cases up to Rs 5,000 Appeals from Munsifs and Subordinate Judges go to the District Judges Small Cause Court Judges try suits to the value of Rs 500. There are also Honorary Munsifs, limited to Rs 200 suits, and village Munsifs, whose jurisdiction is fixed at Rs 20.

## Local Government

Local Government is exercised by means of District and Municipal Boards, the former levying local rates on land-owners, the latter deriving its revenue from octroi and other forms of taxation. The aim is to abolish octroi, because it interferes with through trade. Eighty-five Municipalities possess the privilege of electing their own members and some of them have non-official

**Chairmen** They are generally composed of nominated and elected members, with an official Chairman, who guides them in their duties. They deal with questions of sanitation, communication, lighting, town improvement, roads, water supply, drainage and education. Grants are made to Boards by Governments in some cases for special purposes from general revenues. There is a tendency in the Provinces to give local self-government a wider extension by means of an increase in the number of boards with non-official Chairmen and recently this privilege has been extended to fifteen Municipalities. Small towns, termed Act XX towns also enjoy some measure of local self-government and it is under consideration to extend the principle here, too.

### Finance

The Financial history of the Province has not been a happy one, inadequate settlements, contracts between the Government of India and the local Government, and the severe famine in 1896 having caused Provincial bankruptcies, which for a long time necessitated rigid economy in order to accumulate reserves which could be spent on productive works. Recently liberal Imperial assignments have been made by the Government of India and the financial prospects are accordingly much brighter, giving hopes that ambitious schemes of reform will be able to be carried into effect. The local Government gets 3.8% of the land revenue. The Provincial Budget for 1915-16 shows an opening balance of 184 lakhs, revenue 55 lakhs, and expenditure 691 lakhs, and a closing balance of 93 lakhs.

### Public Works

The Public Works Department is divided into the Roads and Buildings branch and the Irrigation branch, each of which is administered by a Chief Engineer, who is also a Secretary to Government. The Provinces are divided into three circles and ten divisions for the administration of roads and buildings, and into four circles and twenty divisions for irrigation purposes. Each circle is in charge of a Superintending Engineer, and each division is in charge of an Executive Engineer. The whole of the irrigation works constructed or maintained by Government are in charge of the Department, nearly all metalled roads, and also bridges on second-class roads, and generally, all works costing more than Rs 1,000, except in Municipalities. The most important irrigation works within the last twenty years have been the construction of the Betwa Canal, the Fatehpur branch of the Lower Ganges Canal, the Mat branch of the main Ganges Canal, improvements in the Rohilkhand and Terai Canals and extensive drainage operations in the Doab districts of the Meerut and Agra division. Important irrigation extension works are now being considered. The budget for irrigation and other public works for the present year is 144 lakhs.

### Police

The Police Force is divided into District and Railway Police and is administered by an Inspector-General, with five Deputies, one of whom is in charge of Railways, and two Assistants, forty-nine District Superintendents,

two Railway Superintendents, and thirty Assistant Superintendents. There is a Police Training School at Moradabad. There is a local C. I. D. forming a separate detective department, under a Deputy Inspector General, with an assistant. There is an armed police specially recruited, and armed with the Martini Rifle. The present cost of the force is 124 lakhs. The administration of the Jail department is in charge of an Inspector General of Prisons, who is a member of the Indian Medical Service.

### Education

Education is in part wholly State maintained, and partly by means of grants in aid. There is a State University at Allahabad, a Government Sanskrit College at Benares, whilst Arabic and Persian are taught in special classes at the Muir College Allahabad, which also has a special science side which of late has been greatly extended and there is a Government Engineering College at Roorkee (Thomson College). There are aided Colleges in Lucknow (Canning College), (Reid Christian College), and (Isabella Thoburn College), Agra (St. John's), Aligarh (the Mahomedan Oriental College), Gorakhpur, Cawnpore and Meerut, and an unaided College at Benares, the Central Hindu College. In Lucknow there is the Martiniers school, an entirely independent institution, for European and Anglo Indian children, and there is a Girls' Martiniers connected with it, whilst in the Hill Stations, Naini Tal and Mussoorie, there are many excellent private scholastic institutions for European boys and girls, which are attended by students from all over India. Government maintain Training Colleges, for teachers in Lucknow and Allahabad, an Art Crafts and an Industrial School in Lucknow, and an Agricultural College at Cawnpore. Public Schools are almost entirely maintained by the District and Municipal Boards and primary education is almost entirely in their hands. Primary and female education are in a very backward condition and a Committee has recently been sitting at Naini Tal to suggest a remedy. Technical education is being pushed forward and there is a proposal to establish a Technological Institute in Cawnpore. At the close of 1912 there were 1689 urban schools, attended by 103,138 scholars and 10,003 rural schools attended by 482,355 scholars, and the number of secondary schools for Indian boys was 545, viz, Anglo-Vernacular High Schools 102 with 42,611 scholars, Vernacular Middle Schools 375 with 45,378 scholars and English Middle Schools 68 with 10,284 scholars. The amount budgetted for education this year is 67 lakhs.

Higher education is controlled by the Allahabad University (constd in 1887) which consists of a Chancellor, Vice-Chancellor and seventy-five ordinary and four *ex-officio* Fellows, of whom some are elected by the Senate or by registered graduates and the Faculties, and the remainder nominated by the Lieutenant-Governor, in his capacity of Chancellor. The Faculties are those of Art, Science, Law and Medicine, and the University possesses an important Law School. It is proposed to establish a Mahomedan University at Aligarh and a Hindu University at Benares has now received legislative sanction.

The principal educational institutions are—  
The Mahomedan Anglo Oriental College,  
Aligarh—Principal, I. H. Towle

The Central Hindu College, Benares—Principal  
P. B. Adhikari  
St. John's College, Agra—Principal, Rev.  
A. W. Davies

Muir College, Allahabad—Principal, S. G.  
Jennings

Queen's College, Benares—Principal, P. S.  
Lal

Canning College, Lucknow—Principal, M. B.  
Chamson

Agra College—Principal, T. Cuthbertson  
Jones

Red Christian College, Lucknow—Principal,  
Rev. T. C. Badley

Mecut College—Principal, William Jesse

Woodstock College, Mussorie—Principal,  
Rev. H. M. Andrews

Bareilly College—Principal, J. H. Alderson

Christian College, Allahabad—Principal, Rev.  
C. A. E. Janvier

Christ Church College, Cawnpore—Principal,  
Rev. M. S. Douglas

Isabella Thoburn College, Lucknow—Principal,  
Miss Robinson

Thomason College, Roorkee—Principal, Lt.-  
Col. L. H. de Vere Atkinson

King George's Medical College, Lucknow—  
Principal, Colonel Selby, I. M. S.

### Medical

The Medical Department is in charge of  
an Inspector-General of Civil Hospitals.  
A Civil Surgeon is in charge and is  
responsible for the medical work of each district,  
and in a few of the larger stations he has  
an assistant. In two stations (Bankhet and  
Almora) Medical Officers in military employ  
hold collateral civil charge. There are eighty-  
three Assistant Surgeons in charge of important  
dispensaries and a large number of Indian  
hospital assistants. Lady doctors and female  
hospital assistants visit *purda nashin* women  
in their own homes and much good work is  
done in this manner.

The best equipped hospitals, for Indian patients  
are the Thomason Hospital at Agra and the  
Balmampur Hospital at Lucknow. The  
Ramesh Hospital for Europeans at Naini Tal is  
a first class institution and there are also the  
Lady Dufferin Hospitals. King George's Medical  
College and the hospital in connexion with it  
have been opened recently in Lucknow. The  
College is one of the best equipped in the  
country, with a staff of highly efficient professors,  
and the hospital is the first in the  
Provinces. There is an X-Ray Institute at  
Dehra Dun, where valuable research work has  
been carried out and the Pasteur Institute at Kan-  
nauj take cases from all parts of India, and  
there are sanatoria for British soldiers in the  
Hills.

### Administration

Lieutenant-Governor, Sir J. S. Meston, K.C.S.I.  
Assumed charge of office, 16th September 1912

Private Secretary, A. P. Collett, I.C.S.

Honorary Aide-de-Camp, Lieut.-Col. P. H.  
Clutterbuck, Lieut.-Col. J. H. E. Beer, C.I.F.,  
V.D., Lieut.-Col. J. Walker, V.D., Hony. Capt.  
Subadar Major Kanhai Prasad Dube, Risaldar  
Major Qudrat Khan Bahadur

### LEGISLATIVE COUNCIL OF THE LIEUTENANT GOVERNOR

President, The Lieutenant-Governor.

Vice-President, I. M. Holmes, C.S.I.

### Members

H. H. Nawab Sir Muhammad Hamid Ali, Khan  
Bahadur, C.I.F., G.C.V.O., Wali of Rampur

Kunwar Aditya N. Singh, of Benares

J. S. Campbell, C.S.I., C.I.F.

Raja Sir Muhammad Tasadduk Rasul Khan,  
K.C.S.I.

Nawab Mumtaz ud-daula Sir Muhammad F.  
Ali Khan, K.C.I.E., K.C.V.O., C.S.I., of Pahasu.

A. W. Pim

A. L. Saunders, C.S.I.

R. Burn

Rai Nathi Mal Bahadur, C.I.F.

Narsingh Prasad

S. P. O'Donnell

Rana Sir Sheoraj Singh, K.C.I.F.

W. G. Wood

Col. C. Macgregor, C.I.E., I.M.S.

C. F. de la Lisse

D. M. Straight

H. R. C. Hailey

H. C. Ferard

F. Mackinnon

Dr. Tej Bahadur Sapru

Rai Gokul Prasad Bahadur

John Mitchell Holn

Mahadeo Prasad

E. H. Ashworth

Salyid Muhammad Abdur Rau

Shankar Sahai Sahib

Balak Ram

Raja Kushalpal Singh

Brij Nandan Prasad

Moti Lal Nehru

Salyid Muhammad Hadi Khan Bahadur

Maharaja Sir Bhagwati Prasad Singh, K.C.I.F.,  
of Balmampur

Moti Chand

G. T. Anthony

Salyid Raza Ali

Shaikh Shahid Hosain

Asghar Ali Khan

Herbert Watson Pike

Bishambhar Nath

Sukbir Singh

Lt.-Col. S. H. Henderson

H. V. Lovett

Raja Ram Lal Singh, C.I.E., of Kurri-Sudani

Logic P. Watson



Moulvi Salid Karar-ul-Hussain

George Gall Sim.

Pandit Jagat Narayan

Pandit Tara Dut Gairolkar

"

#### SECRETARIAT

Chief Secretary to Government R Burn

Financial Secretary to Government, A W Pim

Judicial " " S P O'Donnell

Secretary to Government, Public Works Dept  
(Buildings & Roads, & Railways), W G Wood  
CSI

Secretary to Government, Public Works Dept  
(Irrigation), G T Anthony

Registrars, I E Lowe, A Grant, W J Summers  
F C Richards

#### BOARD OF REVENUE

Members, J M Holm CSI, J S Campbell,  
CSI, CIL

Secretary, J E Goudge

#### MISCELLANEOUS APPOINTMENTS

Opium Agent, Ghazipur, C L Wild

Director of Land Records and Agriculture, H R  
C Halley

Director of Public Instruction, C F de la Londe

Inspector-General of Police D M Straight

Inspector-General of Civil Hospitals Col C  
Macgregor, M A, MB, CIL, IMS

Sanitary Commissioner, Lieut.-Col S A Harris,  
IMS

Inspector-General of Registration, W Raw

Commissioner of Excise, T A H Wain

Accountant-General, J F Graham

Inspector-General of Prisons, Lt-Col S H  
Henderson, MB, CM, IMS

Postmaster-General, C J H Hogg

Chemical Analyser and Bacteriologist, Dr L H  
Hankin

#### LIEUTENANT-GOVERNORS OF THE NORTH

##### WESTERN PROVINCES

Sir C T Metcalfe, Bart, GCB 1830

The Right Hon the Governor General 1835

In the North-Western Provinces (Lord  
Auckland)

T C Robertson 1840

The Right Hon the Governor General 1842  
In the North Western Provinces (Lord  
Ellenborough)

Sir G R Clerk, KCB 1843

James Thomson Died at Bareilly 1843

A W Begbie, In charge 1853

J R Colvin Died at Agra 1853

L A Reade, In charge 1857

Colonel H Fraser, CB, Child Comdts  
Honour, N-W Provinces 1857

The Right Hon the Governor General 1858  
administering the N-W Provinces  
(Viscount Canning)

Sir G F Edmonstone 1859

R Money, In charge 1863

The Hon Edmund Drummond 1863

Sir William Muir, KCSI 1868

Sir John Strachey, KCSI 1874

Sir George Couper, Bart, CB 1876

#### LIEUTENANT-GOVERNORS OF THE NORTH WESTERN PROVINCES AND CHIEF COMMISSIONERS OF OUDH

Sir George Couper, Bart, CB KCSI 1877

Sir Alfred Comyns Lyall, KCB 1882

Sir Auckland Colvin, KCMG, CIL 1887

Sir Chas H T Crosthwaite, KCSI 1892

Alan Cadell (Official) 1893

Sir Antony P MacDonnell, KCSI (a) 1895

Sir J J D La Touche KCSI 1901

(a) Afterwards (by creation) Baron MacDonnell

#### LIEUTENANT-GOVERNORS OF THE UNITED PROVINCES OF AGRA AND OUDH

Sir J J D La Touche, KCSI 1902

Sir J P Hewett, KCSI CIL 1907

L A S Porter, CSI (Official) 1912

Sir J S Meston KCSI 1912

# The Punjab.

The Punjab, or land of the five rivers, is so called from the five rivers by which it is enclosed, namely, the Jhelum, Chenab, Ravi, Beas and Sutlej. Together with the North-West Frontier Province and the Native State of Jammu and Kashmir which lie to the north, the Punjab occupies the extreme north-western corner of the Indian Empire, and with the exception of the above mentioned province, comprises all of British India north of Sind and Rajputana and west of the river Jumna. Previous to October 1912, the Punjab with its feudatories embraced an area of 136,330 square miles and a population at the Census of 1911 of 24,187,750 (inclusive of 23,587 trans-frontier Baluchis) that is to say, about one-thirteenth of the area and population of the Indian Empire. But the formation of a separate province of Delhi reduced the area and population of the Punjab by about 450 square miles and 380,000 souls respectively. Of the total area of the Punjab, 36,551 square miles are in Native States (34 in number) with a population of 4,212,704, and 2,566 square miles are tribal territory on the western border of Dera Ghazi Khan district with a population of 23,587.

## Physical Features

The greater part of the Punjab consists of one vast alluvial plain, stretching from the Jumna in the east to the Suleman Range in the west. The north-east is occupied by a section of the Himalayas and the Salt Range forms its north-western angle. A few small spurs of the Aravalli mountain system traverse the extreme south-east and terminate in the Ridge at Delhi. The Punjab may be divided into five natural divisions. The Himalayan tract includes an area of 22,000 square miles, with a scanty population living scattered in tiny mountain hamlets. The Salt Range tract includes the districts of Attock, Rawalpindi and Jhelum and part of Shahpur district. Its physical configuration is broken and confused and the mountainous tracts of Murree and Kahuta approximate closely in characteristics to the Himalayan tract. Except in the hills, the rainfall leaves little margin for protection against distress in unfavourable seasons and irrigation is almost unknown. Skirting the base of the hills and including the low range of the Siwaliks, runs the narrow sub-montane tract. This tract, secure in an ample rainfall, and traversed by streams from the hills, comprises some of the most fertile and thickly populated portions of the province. Its population of over four millions is almost wholly agricultural and pastoral but it includes one large town in Sialkot. Of the plains of the Punjab, the eastern portion covers an area of some 36,000 square miles with a population of 10½ millions. East of Lahore, the rainfall is everywhere so far, sufficient that cultivation is possible without irrigation in fairly favourable seasons, but, over the greater part of the area the margin is so slight that, except where irrigation is employed, any material reduction in the rainfall involves distress, if not actual famine. Within the eastern plains lie the large cities of Lahore and Amritsar, and the population in comparison with the western Punjab

is largely urban. The western plains cover an area of 59,000 square miles, with a population of a little over six millions. The rainfall in this area, heaviest in the north and east and decreasing towards the west and south, is everywhere so scanty that cultivation is only possible with the aid of artificial irrigation or upon the low-lying river-banks left moist by the retreating floods. In this very circumstance, these tracts find their scarcity against famine, for there cultivation is almost independent of rain, a failure of which means nothing worse than a scarcity of grass. So little rain is sufficient, and absolute drought occurs so seldom that the crops may be said never to fail from this cause. The western plains embrace the great colony areas on the Lower Chenab and Lower Jhelum Canals which now challenge the title of the eastern plains as the most fertile, wealthy and populous portions of the province. Multan and Lyalpur are the largest towns in the western area. Owing to its geographical position, its scanty rainfall and cloudless skies, and perhaps to its wide expanse of untilled plains, the climate of the Punjab presents greater extremes of both heat and cold than any other portion of India. The summer, from April to September, is scorchingly hot, and in the winter, sharp frosts are common. But the bright sun and invigorating air make the climate of the Punjab in the cold weather almost ideal.

## The People

Of the population roughly one half is Mahomedan, three eighths Hindu and one-eighth Sikh. Socially the landed classes stand high and of these the Jats, numbering nearly five millions, are the most important. Roughly speaking, one half the Jats are Mahomedan, one-third Sikh and one-sixth Hindu. In distribution they are ubiquitous and are equally divided over the five divisions of the province. Next in importance come the Rajputs, who number over a million and a half. The majority of them are Mahomedans by religion, about a fourth are Hindus and a very few Sikhs. They are widely distributed over the province. Both Jats and Rajputs of the Punjab provide many of the best recruits for the Indian Army. The Gujars are an important agricultural and pastoral tribe, chiefly found in the eastern half of the province and in the extreme north-west. In organisation they closely resemble the Jats and are often absorbed into that tribe. There are many minor agricultural tribes, priestly and religious castes (Brahmans, Savads and Kureshis), most of whom are landholders, the trading castes of the Hindus (Khatris, Aroms and Banias) and trading castes of the Mahomedans (Khojas, Parachas and Khakhas), and the numerous artisan and menial castes. There are also vagrant and criminal tribes, and foreign elements in the population are represented by the Baluchis of Dera Ghazi Khan and neighbouring districts in the west, who number about half a million and maintain their tribal system, and the Pathans of the Attock and Mianwali districts. Pathans are also found scattered all over the province engaged in

horse-dealing, labour and trade. A small Tibetan element is found in the Himalayan districts.

### Languages.

The main language of the province is Punjabi, which is spoken by more than half the population. Western Punjabi may be classed as a separate language, sometimes called Lahndi, and is spoken in the north and west. The next most important languages are Western Hindi, which includes Hindustani, Urdu (the polished language of the towns) and other Hindi, Western Pahari which is spoken in the hill tracts, and Rajasthani, the language of Rajputana, Baluchi, Pushto, Sindhi and Tibeto-Burman languages are used by small proportions of the population.

### Agriculture

Agriculture is the staple industry of the province, affording the main means of subsistence to 56 per cent of the population. It is essentially a country of peasant proprietors. About one-sixth of the total area in British districts is Government property, the remaining five-sixths belonging to private owners. But a large part of the Government land is so situated that it cannot be brought under cultivation without extensive irrigation. Thus the Lower Chenab Canal irrigates nearly 1,900,000 acres of what was formerly waste land and the Lower Jhelum Canal, 390,000 acres, and the Lower Bari Doab Canal, when the colonisation scheme is completed, will add 1,200,000 acres to this total. Large areas in the hills and elsewhere which are unsuited to cultivation are preserved as forest lands, the total extent of which is about 8,700 square miles. Of the crops grown, wheat is the most important and the development of irrigation has led to a great expansion of the wheat area, which now occupies in an average year over 8½ millions of acres. The average annual outturn of wheat is 3,000,000 tons, valued at present prices at approximately £20,000,000. Next in importance to wheat is gram, the average annual produce of which is a million tons valued at £5,000,000. Other important staples are barley, rice, millets, maize, oilseeds (rape, toria and sesamum), cotton and sugarcane. Cotton is grown generally throughout the province but the ravages of boll-worm have affected the popularity of the crop. The cotton grown is of the short stapled variety, known as 'Bengals'. The country being preponderantly agricultural, a considerable proportion of the wealth of the people lies in its live-stock. The latest cattle census gives the following figures—cattle, nearly 8,000,000 head, buffaloes, about 850,000, bovine young stock, 3,800,000, sheep, 4,500,000, goats, 4,250,000. Large profits are derived from the cattle and dairy trades and wool is a staple product in the south-west in Kulu and Kangra and throughout the plains generally. The production of hides and skins is also an important industry.

### Industries

The mineral wealth of the Punjab is small, rock salt, saltpetre, and limestone for road-building being the most important products. There are some small coal mines in the Jhelum district, with an output of about 50,000 tons a year, and gold-washing is carried on in most

of the rivers, not without remunerative results. Iron and copper ores are plentiful but difficulties of carriage and the absence of fuel have hitherto prevented smelting on a large scale. The Punjab is not a large manufacturing country, the total number of factories being only 221, the majority of which are devoted to cotton spinning, cleaning and pressing. Cotton weaving as a domestic industry is carried on by means of hand looms in nearly every village. The Salvation Army has shown considerable enterprise in improving the hand weaving industry. Blankets and woollen rugs are also produced in considerable quantities and the carpets of Amritsar are famous. Silk-weaving is also carried on and the workers in gold, silver, brass, copper and earthenware are fairly numerous and ivory carving is carried on at Amritsar and Patiala. The trade of the province is steadily expanding, the total internal trade being valued at 634 crores of rupees. The external trade with Afghanistan, Ladakh and Tibet is valued at 31 lakhs.

### Administration

The administrative functions of Government are performed by a Lieutenant Governor, appointed by the Governor-General with the approval of the Crown. The Lieutenant-Governor in practice is always a member of the Indian Civil Service though military members of the Punjab Commission are eligible for the position. The Punjab Commission, the body which is responsible for the civil administration of the province is recruited from the Indian Civil Service and the Provincial Civil Service. Up to the date of the separation of the North-West Frontier Province from the Punjab, one-fourth of the cadre was drawn from the Indian Army. The business of Government is carried on through the usual Secretariat which consists of three Secretaries, designated (1) Chief, (2) Revenue and (3) Financial Secretaries, and three Under-Secretaries. There is also at present an Additional Secretary. In the Public Works Department, there are also three Secretaries (Chief Engineer), one in the Buildings and Roads Branch and two in the Irrigation Branch. The heads of the Police and Educational Departments are also Under-Secretaries to Government. The Government spends the winter in Lahore and the summer (from the middle of May to the middle of October) in Simla. The Lieutenant-Governor has no Executive Council, but is assisted in legislative business by a Legislative Council of 24 members, of whom eight are elected and 16 nominated by the Lieutenant-Governor. Of the nominated members, not more than ten may be officials, in addition there may be two nominated expert members. Under the Lieutenant Governor, the province is administered by five Commissioners (for Ambala, Jullundur, Lahore, Rawalpindi and Multan) who exercise general control over the Deputy Commissioners—28 in number—each of whom is in charge of a district. A district on an average contains four tahsils, each consisting of about 300 villages. The Deputy Commissioner is usually a Covenanted Civilian or military member of the Punjab Commission, although five Deputy Commissionerships are "listed" for Provincial Civil Servants. The Deputy Commissioner has under him one or more Assistant Commissioners (Coven-



revenue from forests, registration, courts of law, jails, police and education are wholly provincial as well as the income of district boards and municipalities. The Budget for 1915-16 shows a total revenue (including opening balance) of Rs 5,46,03,000, and a total expenditure of Rs 4,81,64,000 leaving a closing balance of Rs 40,39,000.

### Public Works

As was stated in the section on "Administration" the Public Works Department is divided into two branches one for Buildings and Roads and the other for Irrigation. In the former branch, under the Chief Engineer, the province is divided into three circles under Superintending Engineers and 11 divisions under Executive Engineers, while the King Edward Memorial at Lahore also constitutes a special division. The primary object of this branch is the construction and maintenance of Imperial and Provincial works but it also assists municipalities and district boards. The Irrigation branch is under two Chief Engineers, one of whom is also Chief Engineer of Irrigation Works in the North-West Frontier Province. Under them are nine Superintending Engineers in charge of circles and 39 Executive Engineers in charge of divisions. In addition to the work of construction and maintenance Irrigation Officers are responsible for the assessment of water rates leviable on irrigated areas and in several districts where the land revenue demand is assessed on the fluctuating principle, for the formulation of this demand on irrigated crops as well.

### Irrigation

The canal system of the Punjab is admittedly one of the greatest achievements of British rule in India. Not including the enormous Triple Canal project now in process of completion, the total irrigated area in British districts and Native States amounts to 8,269,233 acres. The Beas is the only one of the great rivers of the province from which no canal takes off. The Indus provides supplies for two large series of inundation canals, one on either bank. Taking off from the Jhelum is the Lower Jhelum perennial canal, with 150 miles of main channel and 1,000 miles of distributaries and lower down the river is a large series of inundation canals. The Lower Chenab perennial canal takes off from the Chenab and comprises 427 miles of main channel and branches and 2,278 miles of branches, while below the junction of the Chenab and Ravi rivers is a series of inundation canals on both banks. The Ravi provides supplies for the Upper Bari Doab Canal, which has 370 miles of main line and branches and 1,571 miles of distributaries. Some small inundation canals and the Sidhant system with a length of 200 miles also take off from the Ravi. The Sirhind Canal which has a main line and branches of 538 miles and distributaries amounting to 3,703 miles, takes off from the Sutlej, and there are two systems of inundation canals deriving their supplies from the Upper and Lower Sutlej respectively. In addition to the Grey Canals maintained on the cooperative system in the Ferozepore district and a vast series of inundation canals in Bahawalpur

State. The Western Jumna Canal, which takes off from the right bank of the Jumna, has a main line and branches of 377 miles and distributaries of 1,761 miles. The Triplo Canal project is intended to carry surplus water from the Jhelum and the Chenab to supplement the scanty supplies in the lower reaches of the Ravi and incidentally to afford irrigation to the tracts through which the supply channels pass. The three canals included in the project are known as the Upper Jhelum, Upper Chenab and Lower Bari Doab Canal. Of these the Upper Chenab was opened in April 1912 and the Lower Bari Doab in April 1911 and the Upper Jhelum was opened in December. The most interesting feature of this great work is the level crossing at 14 1/2 miles from Lahore, where the Upper Chenab canal supply is passed across the Ravi into the Lower Bari Doab Canal. The revised estimate of the cost of the whole scheme is £6½ millions.

### Police

The Police force is divided into District and Railway Police. The combined force is under the control of the Inspector General, who is a member of the gazetted force and has under him three Deputy Inspector Generals, for the Eastern (Ambala), Central (Lahore) and Western (Rawalpindi) Ranges respectively and a fourth Deputy Inspector General in charge of Railway Police, Criminal Investigation, the Police Training School and Finger Print Bureau at Phillaur. The Railway Police are divided into two districts, Northern and Southern each under a Superintendent. The District Police are controlled by Superintendents each of whom is in charge of a district, and has under him one or more Assistant Superintendents. The district is divided into circles under charge of Inspectors, and again into thanas in charge of a Sub-Inspector. The staff of a thana consists on an average of one Sub-Inspector, two head constables and 10 constables. A service of Provincial Police officers has also been established consisting of 18 Deputy Superintendents, who are employed as assistants to the Superintendents. The total police force of the province exclusive of gazetted officers, consists of 1,075 officers and about 20,000 men, practically half of whom are armed with revolvers and bolt action rifles. The village police or chaukidars are under the control of the Deputy Commissioner of each district not of the Police Superintendent. The cost of the Police Force is 58½ lakhs.

### Education.

Although the Punjab is usually considered rather a backward province, education has made great strides especially in the last ten years. Government maintain the Government College at Lahore, the Central Training College at Lahore, a Training Class for European teachers at Sanawar (Simla Hills), normal schools at the headquarters of each division, and High Schools at the headquarters of each district, and the Lawrence Military Asylum at Sanawar for European children. There are in the province nine arts colleges (one of them Oriental); 6 professional colleges for males and 1 for females, 111 High

Schools for boys and 16 for girls, 241 middle schools for boys and 145 for girls, 4,518 Primary schools for boys and 707 for girls, 54 schools for special instruction for boys and 12 for girls. The number of pupils attending schools of all classes is 2,182 boys and 456 girls. The principal colleges are—The Government Oriental, German, Christian, Dacca and Dacca and Dacca Slush Colleges at Lahore, Aligarh, Amritsar, Murray State College, Rawalpindi. Professional education is represented by the Law, Medical and Veterinary Colleges of Lahore, the Agricultural College at Lyallpur, the Dental and Commerce School at Amritsar, the Engineering School at Faisal, the Mayo School of Art and the All-India Technical School both at Lahore. There are eight Industrial Schools in the Province maintained by Municipalities or District Boards and others maintained by Musahar Colleges, the Arva Samaj etc. which receive grants-in-aid. The education of the destitute and orphans is provided for by a number of secondary boarding schools in all classes and of primary schools in the cities. The endowments of the province is provided for by the Apehlon Chiefs College for boys and the Omer Mahomed College for girls both at Lahore.

The Education Department is administered by the Director of Public Instruction, who has under him an Inspector of Schools in each civil division with two or more assistants, a District Inspector with assistants in each district, two Inspectors of girls' schools, and an Inspector of European schools. Higher education is controlled by the Punjab University (Incorporated in 1882) which has the Lieutenant-Governor as *ex-officio* Chancellor, a Vice-Chancellor appointed by Government, and a Senate. In addition to the nine arts colleges already mentioned and the Law and Medical Colleges at Lahore, St. Stephen's College Delhi, and the Hindu College, Delhi, and six other colleges in Kashmir, Patala, Bahawalpur, Kapurthala and the North-West Frontier Province are affiliated to the Punjab University.

## Medical

The Medical Department is controlled by the Inspector General of Civil Hospitals (a member of the Indian Medical Service) who also supervises the departments of the Chief Plague Medical Officer and the Chief Malaria Medical Officer. Sanitation is controlled by the Sanitary Commissioner (also a member of the Indian Medical Service) who has under him two Deputy Sanitary Commissioners and is advised by the Sanitary Board, with the Sanitary Engineer as Technical Adviser. Medical work in the districts is in charge of the Civil Surgeons, of whom fourteen are members of the Indian Medical Service and others Military Assistant Surgeons and uncommissioned Medical Officers chiefly Civil Assistant Surgeons. The Mayo Hospital at Lahore and special railway, canal and police hospitals are maintained by Government, but the ordinary hospitals and dispensaries in the districts are maintained by municipal or district funds. Certain private institutions such as the Walker Hospital at Simla and many mission dispensaries receive grants-in-aid. The

Mayo Hospital at Lahore is being greatly extended and improved as a memorial to King Edward VII. The total number of patients treated at all the hospitals and dispensaries in the year is over four and a half millions including nearly 7,000 in patients. A temporary department to combat plague has been organised under the Chief Medical Plague Officer. In the districts the Civil Surgeons are generally in charge of the operations against plague, but additional officers are employed from time to time. There is only one lunatic asylum in the Province at Lahore but there are ten leper asylums. The Pasteur Institute at Kasauli performs the functions of a provincial laboratory for the Punjab. Vaccination is supervised by the Sanitary Commissioner, but is more particularly the concern of the Deputy Sanitary Commissioner who has under him a special staff Civil Surgeons also have a local staff of vaccinators under them.

## Administration

Lieutenant Governor Sir M. J. Oliver K.C.S.I.  
Assumed charge 1917

THE ABOVE STATE

Provost Sergeant Lieut Col F C Bailey  
CIE 1A  
Honorary Adjutant Camp Lieut Col W T  
Wright Honorary Capt Gopal Rikardar Major  
Muhammad Hayat Khan Subedar Bakadur  
Gulab Singh

INITIATIVE COUNCIL

President Th. Lieutenant Governor  
 Mr. President A. H. Black et al

VI. 11231 -

Nonpareil d'

Nawab Sir Idrham Khan K.C.I.  
J C Godley, C.S.I.  
Sir M W Fenton K.C.S.I., I.C.S.  
Sundar Singh, Majithia, Sardar Bahadur  
Col H Hendley M.D. I.M.S.  
A H Durr, C.V.O.  
C A Barron, C.I.  
P J Fagan  
S W Gricey  
Ruzda Bazar Ram  
Khawajah Yusuf Shah, Khan Bahadur  
Nawab Ibrahim Ali Khan of Kunjpur  
J P Thompson  
Col R S MacLagan C.B., C.S.I.

*Elected*

J Currie  
Lala Kashi Ram of Ferozepore  
Ram Saran Das of Lahore  
Hari Chand of Multan  
Gajjan Singh of Ludhiana

Dakhshi Sohan Lal of Lahore  
 Malik Muhammad Amin Khan of Sharnabad  
 Sir P C Chatarji, CIE  
 Secretary, S W Granoov

#### SECRETARIAT

Chief Secretary, C A Barron, CIE, ICS  
 Revenue Secretary, J P Thompson, ICS  
 Financial Secretary, O F Lumsden  
 Registrar, W Burr-Bryan, ICS

#### PUBLIC WORKS DEPARTMENT

##### Irrigation Branch

Secretaries, T R John Ward, CIE, ICS  
 ICS

##### Buildings and Roads Branch

Secretary, Col R S MacLagan, CB, CSI  
 ICS

#### REVENUE DEPARTMENT

Financial Commissioners, A H Black, CVO  
 Sir M W Fenton, KCSI

Director of Agriculture and Industries, C A  
 B H Townsend, BA, ICS

Director of Land Records, Inspector Genl of  
 Registration, and Registrar General, I French,  
 CIE

Director of Fisheries, G C L Howell

#### MISCELLANEOUS APPOINTMENTS

Director of Public Instruction, J C Godley, CSI  
 Inspector-General of Police, Lieut Col H T  
 Dennis, IA

H A Close (N W Frontier Province)

Conservator of Forests, R C McInosh  
 Inspector-General of Civil Hospitals, Colonel  
 Harold Hendley, MD, ICS  
 Sanitary Commissioner, Lt Col Sydney  
 Browning Smith, (D.P.H.), ICS  
 Inspector General of Prisons, Lt-Col G F W  
 Braide  
 Accountant General, W Alder, ICS  
 Postmaster General, G R Clark, ICS

Registrar of Co-operative Credit Societies  
 and Joint Stock Companies, A Langley

#### LIEUTENANT GOVERNORS OF THE PUNJAB

Sir John Lawrence, Bart., GCB	1859
Sir Robert Montgomery, KCB	1859
Donald Friell McLeod, CB	1861
Major General Sir Henry Durand	1870
KCSI CB, died at Tonk, January 1871	
R H Davies, CSI	1871
R D Egerton, CSI	1877
Sir Charles U Aitchison, KCSI,	1882
CIE	
James Broadwood Lyall	1887
Sir Dennis Fitzpatrick, KCSI	1892
William Mackworth Young, CSI	1897
Sir C M Rivaz, KCSI	1902
Sir D C J Ibbetson, KCSI, resigned	1907
22nd January 1908	
T G Walker, CSI (offg)	1907
Sir Jouis W Dane, KCIE, CSI	1903
James McCrone Douie (offg)	1911
Sir M R O Dwyer, KCSI	1913





A third important branch of industry consists of working mines and quarries, in which Burma is particularly rich. The petroleum fields are in the Dry Zone, chiefly at Yenangyaung in the Magwe District where the principal extractor is the Burma Oil Company. The total output of petroleum for the Province in 1913 was nearly 273 million gallons, in 1914 nearly 255 million gallons. In the Ruby Mines District, the Burma Ruby Mines Company at Mogoke produced in 1914 stones valued at £44,000. 3704 ounces of gold were won by the Burma Gold Dredging Company from the bed of the Irrawaddy River, north of Myitkyna.

The Burma Mines Company at Dawdwin in the Northern Shan States produced 24,901 tons of lead slag, valued at Rs 6 lakhs and 8,769 tons of silver lead ore valued at 236 lakhs. 10,482 tons of iron ore were mined in Mandalay District, and 8,553 tons of zinc ore, valued at Rs 10 lakhs, in the Southern Shan States. The Tawmaw Mines of the Myitkyna District produced 406 tons of jade, valued at Rs 2 lakhs.

Tungsten ores, chiefly wolfram, are mined in Tavoy, Mergui and the Southern Shan States. Unofficial returns give the output in the year 1913 as 2,700 tons or nearly twice as much as the United States produces. In five years Burma has risen to the first place amongst countries producing these valuable ores with the United States and Portugal bracketed second.

The rubber industry is still in its infancy, only 10 plantations employing more than 20 persons. The plantations are situated in the Mergui, Amherst, Hanthawaddy and Toungoo Districts. At the Census of 1911, 4,047 people were returned as engaged in the production of rubber. The total quantity exported in 1914-15 was 8,816 cwt. The prospect of rubber in this Province is very promising, but the estimates of the output in the immediate future have been framed in the sanguine spirit of the company promoter and are not likely to be realized.

### Manufactures

There are 424 factories, 240 of which are engaged in milling rice and 89 are sawmills. The remainder are chiefly cotton ginning mills, oil mills for the extraction of oil from groundnuts, and oil refineries connected with the petroleum industry. The average daily number of operatives rose from 50,723 in 1912-13 to 63,066 in 1913-14. The increase was chiefly in rice-mills. At the Census of 1911, 409,743 or only 6.6 of the total population were engaged outside agriculture and production.

As is the case in other parts of the Indian Empire, the imported and factory-made article is rapidly ousting the home-made and indigenous. But at Amarapura in the Mandalay District, a revival has taken place of hand silk-weaving. Burman wood-carving is still famous and many artists in silver still remain, the finish of whose work is sometimes very fine. Bassins and Mandalay parasols are well known and much admired in Burma. But perhaps the most

famous of all hand made and indigenous industries is the lacquer work of Pagan with its delicate patterns in black, green and yellow traced on to a ground work of red lacquer over bamboo. Lacquered articles ranging from those of the most exquisite finish to those of a coarse description are produced at Pagan on the Irrawaddy and are sold throughout the length and breadth of Burma.

### Trade

The total value of the foreign trade in 1914-15 was only 29.1 lakhs, a decline of 70 per cent compared with the previous year. Imports amounted to Rs 1,109 lakhs, or 10 per cent less than in the previous year. Rangoon, the only port with facilities for distribution of goods, took 56.8 per cent of the foreign trade and 83.2 per cent of the Indian trade. The net customs duty was Rs 116 lakhs or 32 per cent less than in 1913-14. The decline in trade was due less to lack of demand than to shortage of shipping owing to the war. Trade with India increased by 5 per cent to Rs 2,562 lakhs.

The most important item of merchandise imported into Rangoon is manufactures of cotton, which account for 25 per cent of the total import trade. These imports are valued at Rs 260 lakhs. The United Kingdom took 61 per cent of the total import trade in 1914-15.

### Administration

In 1897 the Province, which had formerly been administered by a Chief Commissioner, was raised to a Lieutenant Governorship. The head of the Province is therefore now the Lieutenant-Governor. He has a Council of seventeen members, one of whom is elected by the Burma Chamber of Commerce, one by the Rangoon Trades Association and the remaining fifteen are nominated by the Lieutenant Governor. Not more than seven members may be official, the rest must be non-officials and at least four must be selected from the Burmese population, one from the Indian and one from the Chinese community.

Burma is divided administratively into Upper Burma (including the Shan States and Chin Hills) and Lower Burma. The Shan States are administered by the Chiefs of the States, subject to the supervision of the Superintendents in the case of the Northern and Southern Shan States, and to the supervision of the Commissioners of the adjoining Divisions in the case of the other States. The Civil, Criminal and Revenue administration is vested in the Chief of the State, subject to the restrictions contained in the sanad. The law administered is the customary law of the State.

The Chin Hills are administered by a Superintendent.

Under the Lieutenant-Governor are eight Commissioners of divisions, four in Upper and four in Lower Burma. Commissioners in Upper Burma and the Commissioner of the Arakan Division are ex-officio Sessions Judges, but the other three Commissioners have been relieved of all judicial work.



There are four Major Irrigation Works—Mandalay, Shwabo and Mon Canals and the Ye-U canal in the Shwabo District still under construction

### Police

The Police Force is divided into Civil, Military and Rangoon Town Police. The first two are under the control of the Inspector General of Police the latter is under the orders of the Commissioner of Police, Rangoon, an officer of the rank of Deputy Inspector-General.

There are four other Deputy Inspectors General, one each for the Eastern and Western Ranges, one for the Palwar and Criminal Investigation Department and one for the Military Police.

The sanctioned strength of the Civil Police Force at the end of March 1915 was 1456 officers and 14,316 men but the numbers fell 1003 short of the sanctioned strength January 1914 of the Military Police on the 1-1 The Rangoon Town Police stand at 74 officers and 1191 men.

A special feature of Burma is the Military Police. Its officers are deputed from the Indian Army. The rank and file are recruited from natives of India with a few Karens, Kachins, Karens and Shans. The organisation is Military the force being divided into Battalions. The object of the force is to supplement the regular troops in Burma in their duties, apart from their Military work, is to provide escorts for special officers etc. and guards for Treasuries, Jails and Courts.

### Education

At the head is the Director of Public Instruction with an Assistant Director. There are 10 Inspectors of Schools belonging to the Imperial and one belonging to the Provincial Service, and 7 Assistant Inspectors belonging to the Provincial Service. The Rangoon College is staffed by a Principal and nine Professors drawn from the Imperial Service. Outside the Provincial Service Educational Department is the Education Department which holds certain examinations and is an advisory body on educational questions referred to it by Government.

Burma has no University but it has two Colleges—the Rangoon College and the Baptist College which are affiliated to the Calcutta University. Under Government there are—

- An Arts College, Law School, Reformatory School, School of Engineering, Apprentices School, High School for Europeans, High School at Taungtha for the sons of Shan Chiefs, 5 Normal Schools, 15 Anglo-Vernacular High Schools, 18 Anglo-Vernacular Middle Schools and 44 Vernacular Middle Schools.

Ancient system of education in Burma is the system of monastic education known as the *Shan* system. Nearly every village has a monastery (buddhist) and every Burman has according to the

religion, to attend that school, shaving his head and for the time wearing the yellow robe. At the bpoongy-braungs the boys are taught to read and write and an elementary and native system of arithmetic. The result is that there are very few boys in Burma who are not able to read and write and the literacy of Burman men is 412 per mille.

Another feature of education in Burma is the excellent work of the American Baptist Mission which has established schools in most of the important towns in Burma, as well as a College in Rangoon.

### Medical

The control of the Medical Department is vested in an Inspector-General of Civil Hospitals. Under him are 41 Civil Surgeons. There is also a Sanitary Commissioner, two Deputy Sanitary Commissioners, an Inspector-General of Prisons, three whole time Superintendents of Prisons, a Chemical Examiner and Bacteriologist and a Superintendent of the Lunatic Asylum.

A Civil Surgeon is in charge of each District while at the summer Head Quarters of Mawmye there is a special Civil Surgeon.

The total number of Hospitals and Dispensaries was 270 at the end of March 1914. The Rangoon General Hospital is perhaps the finest in the East.

The Pasteur Institute was opened in Rangoon in July 1915. The Inspector is a Senior Member of the Lunatic Medical Service.

The total number of patients treated in 1913 was 1,614,49.

### Administration

- Lieutenant Governor Sir Harcourt Pelly
- KCSI CIE. Appointed 1913
- Private Secretary H C Gad-don
- Aide-de-Camp C J Heath
- Honorary Aide-de-Camp Lt-Col. H Des Vaux CIE. 14
- Indian Aide-de-Camp Honr. Capt. Munier Khan Bahadur Subadar-Major Amir Singh Bahadur
- LE ISLATIVE COUNCIL OF THE LIEUTENANT-GOVERNOR.

- W I Keith
- Lt-Col. E C Townend
- H Thompson.
- Walter Francis Rice CIE. 10
- George Coop-Stowell
- John Carr Rutledge

- Non-Official Members
- Lim Chai Tsong
- Sao Maing CIE.
- Wong Ah-Hong
- Khan Patai



# Bihar and Orissa.

Bihar and Orissa lies between 18°-02' and 27°-30' N latitude and between 82°-31' and 88°-26' E longitude and includes the three provinces of Bihar, Orissa and Chota Nagpur, and is bounded on the north by Nepal and the Darjeeling district of Bengal, on the east by Bengal, on the south by the Bay of Bengal and Madras, and on the west by the United Provinces of Agra and Oudh and the Central Provinces.

The area of the British territories which constitute the Lieutenant-Governorship of Bihar and Orissa is 83,181 square miles inclusive of the area of large rivers. In addition to the districts which are directly under British rule, there are two groups of petty estates which lie to the south and south-west of the Province and which under the names of the Tributary States of Orissa and the Political States of Chota Nagpur are governed each by its own Chief under the superintendence and with the advice of the Commissioner of the nearest British Administrative division. The area of these territories is 28,648 square miles and as it is usual to include them when speaking of Bihar and Orissa the area of the whole Province may be stated at 111,829 square miles. Two of the provinces of the Lieutenant-Governorship of Bihar and Orissa, viz., Bihar and Orissa, consist of great river valleys, the third, Chota Nagpur, is a mountainous region which separates them from the Central Indian Plateau. Orissa embraces the rich deltas of the Mahanadi and the neighbouring rivers and is bounded by the Bay of Bengal on the south-east and walled it on the north-west by Tributary Hill States. Bihar lies on the north of the Province and comprises the higher valleys of the Ganges from the spot where it issues from the territories of the Lieutenant-Governor of the United Provinces of Agra and Oudh. Between Bihar and Orissa, but stretching further westward and deep into the hill country, lies Chota Nagpur.

## The People

The temporary head-quarters of Government are at Ranchi in Chota Nagpur, while the permanent Capital at Patna is under construction. The Province has at present no hill station.

The Province has a population of 38,435,293 persons which is very little less than that of France and rather more than that of the Bombay Presidency. The province is almost entirely rural, no fewer than 986 per mille of the population living in villages. Even so with 344 persons per square mile, Bihar and Orissa is more thickly populated than Germany. There are only three towns which can be classed as cities namely, Patna, Gaya and Bhagalpur. During the last thirty years the population of Patna, the capital designate, has been steadily diminishing. Hindus form an overwhelming majority of the population. Though the Muhammadans form less than one-tenth of the total population they constitute more than one-fifth of urban population of the province. Animists account for 7 per cent. These are inhabitants of the Chota Nagpur plateau and the Santal Parganas.

## Industries

The principal industry is agriculture, Bihar more especially North Bihar, being the "Garden of India." Rice is the staple crop but the spring crops, wheat, barley, oats and the like are of considerable importance. It is estimated that the normal area cultivated with rice in this Province is 17,200,000 acres or 63 per cent. of the cropped area of the Province. Wheat is grown on about 1½ million acres, barley on 1,428,200 acres, maize or Indian-corn on 1,769,300 acres the latter being an autumn crop. Oilseeds are an important crop, the cultivation having been stimulated by the demand for them in Europe. The exports in various kinds of oilseeds amounted to 5,758,390 maunds valued at Rs. 3,58,63,482. It is estimated that 2,021,300 acres of land are annually cropped with oil-seeds in the Province. There is irrigation in Gaya, Champaran and Muzaffarpur districts in Bihar and in Balasore and Cuttack in Orissa. The Indigo industry has been steadily on the decline during the last twenty years, the total areas sown having decreased from 342,000 acres in 1896 to 109,600 acres in 1911. The principal cause of this has been the discovery of the possibilities of manufacturing synthetic or chemically prepared indigo on a commercial scale, a process chiefly carried out in Germany. All the districts of Bihar with the exception of Purneah are liable to famine. The last serious famine was in 1895-96. In any year in which monsoon currents from either the Bay of Bengal or the Arabian Sea are unduly late in their arrival or cease abruptly before the middle of September the agricultural situation is very grave. It may be said that for Bihar the most important rainfall is that known as the *haua*, due towards the end of September or up to middle of October. Rain at this time not only contributes materially to an increased outturn of the rice crop, but also provides the moisture necessary for starting the spring or *rabi* crops.

## Manufactures

Opium was formerly, with indigo, the chief manufactured product of Behar, but in consequence of the recent agreement with the Chinese Government the Patna Factory has been closed. At Monghyr the Peninsular Tobacco Company have erected one of the largest cigarette factories in the world and as a result tobacco is being grown much more extensively. There are two important iron works in the Singhbhum District, Messrs Tata & Co's Iron and Steel Works at Sakchi and the Bengal Iron and Steel Company at Dhuia. Both these works possess considerable economic possibilities and are likely to have a far reaching effect on the iron and steel trade of India in the future. By far the most important of the mineral industries in the province is that concerned in the raising of coal. The coalfields in the Manbhum District have undergone an extraordinary development in the past twenty years. Though the limits of the district include a portion of the Raniganj field, its fame as a coal-producing area is now identified practically with the Jharla field. The importance of the industry may be said to date from the opening of the railway from Barakar to Duanbaid and Katras in 1894, and

from Kusunda to Pathordi in 1895. In 1894 the outturn of all the mines in the district was only 126,656 tons. In 1895 it rose to 1,281,294 tons the enormous increase being almost entirely from the Jharia field. In the two succeeding years there was a set back, but from 1898 there was a steady rise in the outturn which first touched two million tons in 1901. In 1905 the outturn had swelled to nearly three million tons and in 1906 to nearly four millions, in 1907 over 5,800,000 tons were raised and in the following year no less than seven million tons. In 1914-15 the production of Indian coal had been raised to 16,404,000 tons valued at Rs. 553 lakhs. Of this total 56 per cent was raised in the Jharia fields and 30 per cent from the Raniganj coal fields of Bengal. The entrance of the Bengal-Nagpur Railway in the Jharia field in 1904, and the subsequent extension of various small loops and branches, besides innumerable sidings from both systems, the doubling of the line from Barakar to Dhanbaid, the opening of the section of the East Indian Railway of the Grand Chord from Dhanbaid to Gomoh have all contributed to this rapid development. The tendency, however, which was manifest in 1907 and 1908 to open out new collieries has been checked. Giridih in Hazaribagh is also the centre of a considerable coal-mining industry, containing, as it does, mines owned and worked by the East Indian Railway Company. The Bokaro-Ramgarh field in the same district is likely to be of great economic importance as soon as the area is fully opened up by the railway now under construction. It immediately adjoins the Jharia field across the Hazaribagh border. There is a large undeveloped coal supply, it is believed, in the Districts of Palamau and Hazaribagh.

### Administration

The Province is administered by a Lieutenant-Governor in Council. The Lieutenant-Governor is appointed by the Crown and is a senior member of the Indian Civil Service. He is assisted by a Council of three members, two of whom are drawn from the Indian Civil Service while the third, in practice, is an Indian. Each member takes charge of departments and in the event of any difference of opinion regarding inter-departmental references the matter is decided in Council. In practice all important cases are submitted through the member concerned to the Lieutenant-Governor.

The unit of executive administration is the District. The District Officer is styled District Magistrate and Collector, except in the Scheduled districts where he is known as the Deputy Commissioner. The ordinary district jails are placed in charge of a Superintendent, usually the Civil Surgeon while the Magistrate pays periodical visits of inspection. All District Officers are *ex-officio* Registrars, and as *ex-officio* Chairmen of the District Boards, they have control over elementary education, and are charged with the execution and administration of all local public works. In a word, the District Officer is the executive chief and administrator of the tract of country committed to him. As District Magistrate he is also local head of the magistracy who tries all cases, except the more

important which are sent for trial at the Sessions, but except in the Scheduled districts he seldom presides in Court, and his share in this part of the administration is practically confined to the distribution of work, the hearing of petty appeals and the general superintendence of his subordinates. The latter combine Revenue with their magisterial functions and as Deputy Collector exercise under his control many of the powers of a Collector. The police, by whose aid he carries on the criminal administration, have as their local superior a Superintendent, who in all matters, except those concerning the discipline and internal economy of the force, has to carry out such instructions as he receives from the District Magistrate. The Sub-divisional Officers, who are Joint, Assistant and Deputy Magistrates in charge of divisions of districts, occupy, to a great extent, in their own jurisdictions, the position of the District Officer, except in respect of the police, over whom they have only judicial and no executive control. There are 21 Districts.

Above the District Magistrates are the Divisional Commissioners. Their duties are principally those of supervision. In almost all matters they exercise a general superintendence, and especially in the Revenue Department they control the Collectors' proceedings. Commissioners are the channels of communication between the local officers and Government, sifting, collating and bringing together, in a compact form the information they receive. In revenue matters the Commissioner forms a Court of appeal and in this and other respects is subject to the orders of the Board of Revenue. With this exception he is in subordination to Government direct.

The Civil Secretariat consists of the Chief Secretary, who is in charge of the Judicial, Political, Appointment and Education Departments, the Revenue Secretary, the Financial and Municipal Secretary and their three Under Secretaries.

### Finance

The Province of Bihar and Orissa was formed with five divisions, detached from the old province of Bengal with effect from the 1st April 1912. The old arrangements made with the Government of Bengal regarding the financial administration of the Province therefore ceased to apply from that date. A fresh arrangement has, however, been made, with the approval of the Secretary of State. As the method adopted was in some measure tentative and provisional, a temporary settlement for a period of three years only has been effected. Owing to the war it has been found necessary to continue the provisional settlement for the present. Under the terms of this settlement the whole of the receipts under the heads of Provincial Rates, Forest, Registration, Courts of Law, Jails, Police, Ports and Pilotage, Education, Medical have been made over entirely to the local Government together with their corresponding charges. In addition to these, it receives three-fourths of the receipts from stamps, assessed taxes, major and minor irrigation works, the whole of the Land Revenue collected from Government Estates one-half of the receipts under all other sub-heads excepting

In accordance with the provisions of Section 1 of the Act, the Board is to consist of not less than 1 member. Local Boards are usually of 3 or 5 members, and in some cases, of the whole of the District Board, as the case may be. In some cases, by Statute, there are 2 Local Boards, the whole of the members are constituted an Executive Committee.

Chairman of the District Board is appointed by Government, he is usually the Magistrate of the district

### Land Tenures

Estates in the Province of Bihar and Orissa are of three kinds. Permanently settled from 1793 to be found in the Patna, Tirhut and Bhagalpur divisions, Temporarily settled as in Chota Nagpur and parts of Orissa. and estates held direct by Government whether as proprietor or managed in the Court of Wards. The passing of the Bengal Tenancy Act (VIII of 1885) safeguarded the rights of the cultivators under the Permanent Settlement Act. Further, the Settlement Department under the supervision of the Director of Land Records takes periodical survey and settlement operations in the various districts both permanently and temporarily settled. In the former, the rights of the under tenants are accorded and attested, while in the latter there is the re settlement of rents. In the re-settlement proceedings, rents are fixed not only of landlords but also for all the tenants. A settlement can be ordered by Government on application made by raiyats.

The tenures of Orissa are somewhat different. Under the zamindars, that is, the proprietors who took settlement from Government and pay revenue to Government direct, is a class of subordinate proprietors of proprietary tenure holders, who were originally village headmen, dealing more or less direct with the revenue authorities. They have a variety of names, such as *mukadam*, *padhan*, *maurusi*, *sarbaralar*, *pursethi*, *thariddar* and *shikmi* zamindar. These sub-proprietors or proprietary tenure holders pay their revenue through the zamindars of the estates within which their lands lie. In Chota Nagpur, Orissa and the Santal Parganas, the rights of village headman have been recognised. The headman collects the rents and is responsible for them minus a deduction as remuneration for his trouble.

### Police

The Departments of Police, Prisons and Registration are each supervised and inspected by an Inspector General with a suitable staff of assistants under the general direction of Government. The Commissioner of Excise and Salt is also Inspector General of Registration.

Under the Inspector General of Police are three Deputy Inspectors General and 25 Superintendents. There are also 25 Assistant Superintendents of Police and 16 Deputy Superintendents. The force is divided into the District Police, the Railway Police and the Military Police. A Criminal Investigation Department has also been formed for the collection and distribution of information relating to professional criminals and criminal tribes whose operations extend beyond a single district and to control, advise, and assist in investigations of crime of this class and other serious cases in which its assistance may be invoked. There are two companies of Military Police which are maintained as reserves to deal with serious and organised disturbances and perform no ordinary civil duties. The work of the Railway Police is practically confined to offences actually committed on the railways, but they are under the control of the Deputy Inspector General of the Criminal Investigation

Department, and an important part of their duties is to co-operate with the District Police in watching the movements of bad characters by rail. The prevention and detection of crime in the Province generally is entrusted to the District Police. In that work they are assisted by the rural police, known as *chokidars* and *dastidars*, who form no part of the regular force, but are under a statutory obligation to report all cognizable crime at the police station, and generally to assist in the prevention and detection of crime. They are not whole-time servants of Government, but they are paid a small monthly salary which is realized from the villagers by the panchayat. The cost of the police is Rs 46,48,000.

### Education

The Department of Public Instruction is controlled by a Director. There are four Divisional Inspectors of Schools, one of whom inspects European schools in addition to his own duties. 2 Additional Inspectors, 3 Assistant Inspectors, including the Agency Inspector in Orissa, 4 special officers for Muhammadan Education, 24 Deputy Inspectors (exclusive of one in Native States), 180 Sub Inspectors (exclusive of five paid by Native States), 46 Assistant Sub-Inspectors (exclusive of one paid by a Native State) and 250 Guru Instructors (exclusive of nine paid by Native States).

The main divisions of Educational Institutions are Primary, Secondary, Collegiate and Training.

The main object of Primary Schools is to provide the masses with sufficient knowledge of reading, writing, and arithmetic, to secure them in their dealings with the money lender and zamindar or zamindars underlings. Primary Schools for Indian boys are of two classes: Upper and Lower.

It is probable that there will eventually be a new University situated at Patna. The important Secondary Schools are the district or Zilla Schools to be found at the head-quarters of each district. The Higher English Schools which include private institutions as well as Government aided schools at sub-divisional head-quarters and Middle English and Middle Vernacular Schools which are under the control of District Boards. The District and Local Boards are also responsible for Primary Education with the assistance of the expert advisers of the Education Department. There are at present seven colleges in the province—two at Patna, one at Bhagalpur, one at Cuttack, one at Hazaribagh, (managed by the Dublin Mission), one at Muzaffarpur and a small College at Monghyr. The number of High Schools for Indian pupils under Public management is 21 with 6,200 pupils, while 44 with 9,350 pupils are aided by public funds. There are 23,231 Primary Schools with an attendance of 645,252 pupils. Of these, 16,802 are maintained or aided by public funds. The village schoolmaster or *guru* is now receiving special training. There are 130 Guru Training Schools for masters and 8 Training Schools for Mistresses. Other special institutions are 36 Industrial and Artisan Schools, two Commercial Schools and 14 Mad-rasas, where instruction is given in Arabic and Persian. The expenditure on public education from public funds amounts to Rs 48,95,000.



**Medical.**

The Medical Department is under the control of the Inspector-General of Civil Hospitals who is a Member of the Indian Medical Service. Under him there are 20 Civil Surgeons who are responsible for the medical work of the districts at the head-quarters of which they are stationed. 50 Dispensaries are maintained by Government—

State Public	14
State Special Police	23
State Canal	5
State Others	8
<b>Total</b>	<b>50</b>

Besides these there are 299 Dispensaries maintained by Local bodies, Railways, private persons, etc. 3,159,646 patients including 46,421 in-patients were treated in 1914. There is one Lunatic Asylum and 8 Institutions for the treatment of lepers.

The Sanitation Department is in charge of the Sanitary Commissioner who is directly subordinate to Government as its expert adviser in regard to sanitation. There are three Deputy Sanitary Commissioners who work under the control of the Sanitary Commissioner. Vaccination is carried out by a staff under the direction of the Sanitary Commissioner. There is also a qualified Sanitary Engineer.

**Administration**

*Lieutenant-Governor*, Sir Edward Gait, KCSI, OIE. Assumed charge of office, 19th November 1915.

**PERSONAL STAFF**

*Private Secretary*, J C B Drake, IOS  
*Aide-de-Camp*, D B Cumming, Indian Police  
*Honorary Aides-de-Camp*, Hon Capt Sardar Bahadur Hira Singh, Subadar Major Sita Ram Singh, Lieut-Col V. N. Hickley, V D, Major A T Peppe

**EXECUTIVE COUNCIL**

E V Levinge, CSI Took his seat, 1st August 1912  
 Maharaja Bahadur Sir Rameswar Singh, K OIE of Darbhanga Took his seat, 1st August 1912  
 Sir William Vincent, Kt Took his seat, 19th November 1915

**LEGISLATIVE COUNCIL**

*President*, The Lieutenant-Governor  
*Vice-President*, E V Levinge, CSI

**Ex-Officio**

The Members of the Executive Council—

**NOMINATED****Officials**

C E A W. Oldham.  
 J. G. Jennings  
 L. C. Adams  
 J. F. Gruning  
 E. H. C. Walsh  
 G. L. Searlight

H. Coupland  
 F. Clayton  
 H. McPherson  
 Ahsan-ud-din Ahmad, ISO.  
 L. I. Hammond  
 R. T. Dundas  
 L. F. Morshead  
 J. R. F. Lewis  
 F. F. Lyall.

**Non-Officials**

Maharaja Bahadur Sir Ravaneswar Prasad Singh, K OIE  
 Rai Bahadur Nishi Kanta Sen  
 Madhu Sudan Das, OIE.  
 Rev. A. Campbell, DD

**ELECTED**

Keshari Prasad Singh  
 Kumar Ghrja Nandan Singh  
 Kirtyanand Singh  
 Raja Rajendra N. Banj Deo  
 Kumar Thakur G. Prasad Singh  
 W. A. Lee  
 T. R. Filgate, OIE  
 Saiyid Fakhr-ud-din, Khan Bahadur  
 Vahub Hasan Khan Khan Bahadur  
 Saiyid Muhammad Tahir  
 Khwaja Muhammad Nur  
 Bishun Prasad  
 Dwarka Nath Rai Bahadur  
 Lachmi Prasad Sinha  
 Nimal Charan Mitra  
 Sharat Chandra Sen  
 Krishna Sahai Rai Bahadur  
 Braja Kishor Prasad  
 Kumar Sheonandan Prasad Singh  
 Sudam Charan Nali, Rai Bahadur  
 Gopi Krishna

**SECRETARIAT**

*Chief Secretary to Government, Political, Appointment, and Educational Department*, H. McPherson

*Secretary to Government, Financial and Municipal Departments*, E. L. Hammond

*Secretary to Government, Revenue Department*, H. Coupland

*Secretaries to Government (P. W. D.), Irrigation Branch*, F. Clayton

*Buildings and Roads Branch*, G. L. Searlight

**BOARD OF REVENUE**

*Member*, W. Maude

*Secretary*, J. A. Hubback

**MISCELLANEOUS APPOINTMENTS**

*Director of Public Instruction*, J. G. Jennings

*Inspector-General of Police*, R. T. Dundas

*Conservator of Forests*, H. Carter

*Inspector-General of Civil Hospitals*, Vacant

*Sanitary Commissioner*, Lt-Col 'E. C. Hare, I M E

*Inspector-General of Prisons*, Lt-Col Bawa. Jivan Singh

*Accountant-General*, V. C. Scott O'Connor

*Director of Agriculture*, G. Milne

*Registrar of Co-Operative Credit Societies*, B. A. Collins

# The Central Provinces and Berar.

The Central Provinces and Berar compose a great triangle of country midway between Bombay and Bengal. Their area is 130,991 miles, of which 82,000 are British territory proper and the remainder held by Feudatory Chiefs. The population (1911) is 13,918,308 under British administration and 2,117,002 in the Feudatory States. Various parts of the Central Provinces passed under British control at different times in the wars and tumult in the first half of the 19th century and the several parts were amalgamated after the Mutiny, in 1861, into the Chief Commissionership of the Central Provinces. Berar was, in 1853, assigned to the East India Company as part of a financial arrangement with the Nizam and was transferred to the Central Provinces in 1903, as the result of a fresh agreement with the Nizam.

## The Country

The Central Provinces may roughly be divided into three tracts of upland, with two intervening ones of plain country. In the north-west, the Vindhyan plateau is broken country, covered with poor and stunted forest. Below its precipitous southern slopes stretches the rich wheat growing country of the Nerbada valley. Then comes the high Satpura plateau, characterised by forest covered hills and deep water cut ravines. Its hills decline into the Nagpur plain, whose broad stretches of shallow black cotton soil make it one of the more important cotton tracts of India and the wealthiest part of the C P. The Eastern half of the plain lies in the valley of the Wainganga and is mainly a rice growing country. Its numerous irrigation tanks have given it the name of the "lake country" of Nagpur. Further east is the far-reaching rice country of Chattisgarh, in the Mahanadi basin. The south-east of the C P is again mountainous, containing 24,000 square miles of forest and precipitous ravines, and mostly inhabited by jungle tribes. The Feudatory States of Bastar and Kanhar lie in this region. Berar lies to the south-west of the C P and its chief characteristic is its rich black cotton-soil plains.

## The People

The population of the province is a comparatively new community. Before the advent of the Aryans, the whole of it was peopled by the Gonds and these aboriginal inhabitants fared better from the Aryans than their like in most parts of India because of the rugged nature of their home. But successive waves of immigration flowed into the province from all sides. The early inhabitants were driven into the inaccessible forests and hills, where they now constituted a large portion of the tribes in those parts, who form a quarter of the whole population of the C P. The Gonds are still found in large numbers in all parts of the province, but they are partially concentrated in the south-east. The main divisions of the new comers are indicated by the language divisions of the province. Hindi, brought in by the Hindustani-speaking peoples of the North, prevails in the North and East, Marathi in

Berar and the west and centre of the C P. Hindi is spoken by 56 per cent of the population and is the *lingua franca*. Marathi by 31 per cent and in Berar, and Gond by 7 per cent. The effects of invasion are curiously illustrated in Berar, where numbers of Moslems have Hindu names, being descendants of former Hindu officials who on the Mahomedan invasion adopted Islam rather than lose their positions. The recent census shows that a gradual Brahmanising of the aboriginal tribes is going on. The tribes are not regarded as impure by the Hindus and the process of absorption is more or less civilising.

## Industries

When Sir Richard Temple became first Chief Commissioner of the C P the province was land-locked. The only road was that leading in from Jubbulpore to Nagpur. The British administration has made roads in all directions, the two trunk railways between Bombay and Calcutta run across the province and in the last few years a great impetus has been given to the construction of subsidiary lines. These developments have caused a steady growth of trade and have aroused vigorous progress in every department of life. The prime industry is, of course, agriculture which is assisted by one of the most admirable agricultural departments in India and is now receiving additional strength by a phenomenal growth of the co-operative credit movement. The land tenure is chiefly on the zemindari, or great land-lord, system, ranging, with numerous variations, from the great Feudatory chiefships, which are on this basis, to holdings of small dimensions. A system of land legislation has gradually been built up to protect the individual cultivator. Berar is settled on the Bombay ryotwari system. Thirty-eight per cent or about 44,000 square miles of the C P is forest. In Berar the forest area is 3,941 square miles. The rugged nature of the greater part of the country makes forest conservation difficult and costly. Excluding forest and wastes, 57 per cent of the total land is occupied for cultivation, in the most advanced districts the proportion is 80 per cent, and in Berar the figure is also high. The cultivated area is extending continuously except for the temporary checks caused by bad seasons. Rice is the most important crop of the C P, covering a quarter of the cropped area. Wheat comes next, with 15½ per cent, then pulses and cereals used for food and oil seeds, with 11 per cent and cotton with 7 per cent. In Berar cotton occupies nearly 40 per cent of the cropped area, jowar covers an equal extent, then wheat and oil seeds. In agriculture more than half the working population is female.

## Commerce and Manufactures

Industrial life is only in its earliest development except in one or two centres, where the introduction of modern enterprise along the railway routes has laid the foundations for great future developments of the natural wealth of the province. Nagpur is the chief centre of

a busy cotton spinning industry. The Empress Mills, owned by Parsi manufacturers, were opened there in 1877 and the general prosperity of the cotton trade has led to the addition of many mills here and in other parts of the province. The total output of spun yarn now amounts to approximately 50 million yards a year.

The largest numbers engaged in any of the modern industrial concerns are employed in manganese mining. Then follow coal mining, the Jabulpore marble quarries and allied works, the limestone quarries, and the mines for pottery clay, soapstone, &c.

The total number of factories of all kinds legally so described was 438 in 1914, the latest period for which returns are available and the number of people employed in them 47,159. The same economic influences which are operative in every progressive country during its transition stage are at work in the C P and Berar, gradually sapping the strength of the old village industries, as communications improve, and concentrating industries in the towns. While the village industries are fading away, a large development of trade has taken place. The last available reports show an increase in volume by one-third in eight years. In 1914 for the first time, statistics for the Berar factories were incorporated with those of the C P.

### Administration

The administration of the Central Provinces and Berar is conducted by a Chief Commissioner, who is the controlling revenue and executive authority and is appointed by the Governor-General-in-Council. He is assisted by three secretaries, two under-secretaries and an assistant secretary. Simultaneously with the jubilee of the foundation of the Province in 1913 a Legislative Council was constituted. It consists of 24 members, excluding the Chief Commissioner, 7 being elected by municipalities, District Councils and Landholders in the C P and 17 nominated by the Chief Commissioner, of whom not more than 10 may be officials and 3 shall be non-officials chosen respectively by the municipalities, District Boards and Landholders of Berar. The Chief Commissioner may nominate an additional member, official or non-official, who has special knowledge of a subject on which legislation is pending. The C P are divided for administrative purposes into four divisions, and Berar constitutes another division. Each of these is controlled by a Commissioner. Berar is divided into six districts, three other divisions into three districts each and one into three, and these are controlled by Deputy-Commissioners, immediately subordinate to the Commissioners. The principal heads of Provincial departments are the Commissioner of Settlements and Land Records, the Inspector-General of Civil Hospitals and Sanitary Commissioners, the Inspector-General of Police, the Inspector-General of Prisons, the Director of Public Instruction, the Commissioner of Excise and Miscellaneous Revenue, and the Director of Agriculture and Industries. The Deputy-Commissioners of districts are the chief revenue authorities and District Magistrates, and they exercise the usual powers and functions of a district officer. The district

forests are managed by a forest officer, usually a member of the Imperial Forest Service, over whom the Deputy-Commissioner has certain powers of supervision, particularly in matters affecting the welfare of the people. Each district has a Civil Surgeon, who is generally also Superintendent of the District Jail and whose work is also in various respects supervised by the Deputy-Commissioner. The Deputy-Commissioner is also marriage registrar and manages the estates of his district which are under the Court of Wards. In his revenue and criminal work the Deputy-Commissioner is assisted by (a) one or more Assistant Commissioners, or members of the Indian Civil Service, (b) one or more Extra-Assistant Commissioners, or members of the Provincial Civil Service, usually natives of India, but including a few Europeans and Eurasians, and (c) by tahsildars and naib tahsildars, or members of the Subordinate service, who are nearly always natives of India. The district is divided for administrative purposes into tahsils, the average area of which is 1,500 square miles. In each village a lambardar, or representative of the proprietary body, is executive headman.

### Justice

The Judicial Commissioner is the highest court of civil appeal, and except in cases against European British subjects, in which the High Court of Bombay has jurisdiction, is the highest court of criminal appeal. He is assisted by an Additional Judicial Commissioner for the Central Provinces and another for Berar. The administration of criminal justice was formerly entirely in the hands of Commissioners and the District staff, but Commissioners have now no criminal powers as such and their place as Sessions Judges has been taken by Divisional Judges. By the Civil Courts Act of 1904, the civil has finally been separated from the executive department. The civil staff consists of Divisional Judges, District Judges, Subordinate Judges and Munsiffs.

### Local Government

Municipal administration was first introduced under the Punjab Municipal Acts and the Municipality of Nagpur dates from 1864. Several revising Acts extend its scope. Viewed generally, municipal self-government is considered to have taken root successfully. The general basis of the scheme is the Local Board for each tahsil and the District Council for each district. In Berar these bodies are called Taluk Boards and District Boards. The larger towns have municipalities. A certain proportion of the Local Board members are village headmen, elected by their own class, others are elected representatives of the mercantile and trading classes and a third proportion, not exceeding  $\frac{1}{3}$  of the whole, are nominated by Government. The constitution of the District Councils is similar. The officers of the District Councils are frequently non-officials, but it is generally found convenient that the Tahsildar and Naib Tahsildar should be Chairman and Secretary of the Local Boards. The District Councils have no power of taxation and Local Boards derive their funds in allotments from the District Councils. Rural education and sanitation are among the primary objects to

which these bodies direct their attention and expenditure on famine relief is in the first instance a charge upon the District Council funds

### Finance

The main sources of Government income in the province has always been the land revenue, but under Mahadta rule many petty imposts were added in all branches of trade and industry and life in general. Thus there was a special tax on the marriage of Buias and a tax of a fourth of the proceeds of the sale of houses. The scheme of Provincial finance was introduced in 1871-72. Special settlements under this system have been necessitated in view of the special circumstances of the province and the recurrence of famine, which a few years ago caused a severe economic strain upon the province. The wave of prosperity which has spread over the country in the past 14 years, since the end of the previous period, has more than trebled the funds available for the administration, compared with what they were before the several years of scarcity, and the progress of the administration and of expenditure has increased correspondingly, without any increase of taxation under provincial heads.

### Public Works.

The Public Works Department is controlled by a Chief Engineer, who is also Secretary to the Chief Commissioner. There are two Superintending Engineers for roads and buildings and a third in charge of irrigation. In 1892 a separate division of the Public Works Department was formed for the construction of roads and buildings in the Feudatory States. The expansion of the department and its work has been one of the most remarkable features of the administration in the past decade and a half, largely owing to the demands of a progressive age in regard to communications and new buildings. The Irrigation Branch of the P W D represents a completely new departure. It was formerly the accepted view that the irregular surface of the country would make irrigation canals impossible and that the S W monsoon was so regular that it would pay better to relieve famine than to prevent it. Both conclusions have been reversed. Picked officers investigated projects for irrigation when the Irrigation Commission was appointed (1901) and canal and storage works have since been advanced with vigour. The Tandula, Wainganga and Mahanadi canal projects are amongst the more important schemes.

### Police.

The police force was constituted in its present basis on the formation of the province, the whole of which, including the Municipalities, is under one force. The strength is equal to one man per 9 square miles of area. The superior officers comprise an Inspector-General whose jurisdiction extends over Berar, Deputy Inspectors-General, in charge of the Eastern and Western range and of the Criminal Investigation Department, and the usual cadre of District Superintendents, Assistant and Deputy Superintendents, and subordinate officers. On three railways special railway police are employed and on others the Provincial force. A Special Reserve of 200 men is distributed over the head-quarters of six districts, for use in dealing with armed disturbers of the peace

in whatever quarter they may appear. The men in this reserve are regularly drilled and armed with rifles. There is a small force of Mounted Police. The Central Provinces have no village police as the term is understood in some other parts of India. The village watchman is the subordinate of the village headman and not a police official and it is considered very desirable to maintain his position in this respect.

### Education

The educational department was constituted in 1862 and the scheme then drawn up has remained the basis of the system of public education to the present day. The leading principles are that the department should content itself with the direct management of colleges and higher secondary schools, the training of teachers and inspection in work in rural areas. The maintenance of rural schools should as far as possible be left to the local authorities, every encouragement should be given to private philanthropy and no Government schools should be founded where there existed a sufficient number of institutions capable, with the assistance of the State of supplying the local demand for instruction. At the head of the Department is the Director of Public Instruction, who has a staff of Inspectors and an Inspectress for girls' schools. The Educational Service includes these appointments, except the last. An Agency Inspector supervises the schools of the Feudatory States. The province has three colleges: a Government College at Jubbulpore, and the Morris and Hislop Colleges at Nagpur. The Agricultural Department maintain an Agricultural College at Nagpur. The Colleges are affiliated to Allahabad University, but a demand has arisen for a local University.

After much preliminary discussion, a committee was appointed in July, 1914, to frame a scheme "which shall provide for a University of the teaching type at Nagpur, or in its immediate neighbourhood, and for the affiliation to this central institution of colleges situated in other places in the C P and Berar." The committee in their report, issued last year, propose a University presenting some of the features of an affiliating University but possessed of functions and endowed with responsibilities which transcend the scope of those universities in India which conform to that type. "For (says the report) it will not only be an examining but a teaching university, and its teaching activities will not be limited to the provision of courses of instruction for postgraduate degrees, but will embrace several departments of study in the lower courses. The main difference, however, between the university which we propose and existing universities will lie in the closer relations of the former with its constituent colleges. According to our scheme, the University will exercise an effective control over the teaching and discipline of all the institutions which come within its jurisdiction. For it is only by exercising control over its component parts that the Universities can maintain a high standard of moral and intellectual endeavour, and create traditions which will make themselves felt in the development of the Provinces as a whole."

The committee say "The University which we propose will possess powers which will entitle it to a high place in the administrative machinery of the Provinces. But administrative autonomy involves a certain measure of financial independence, and we have made proposals accordingly. It is true that the University will be mainly dependent on the Government for financial support. Apart from fees, the University at first at any rate, will have no resources of its own. But we confess to a desire to see it vested with financial control over the grant which it receives from Government as well as over its other receipts. If we may be permitted to employ a simile, the Government should regard the University as a business concern, of which it is a shareholder with a seat on the Board of Directors rather than as a servant to whom it makes certain payments, the disposal of which must be checked frequently and in detail.

"We recommend that the administration of the University be vested in a Chancellor, Vice-Chancellor, Senate and Syndicate. The Chief Commissioner of the Province will be the Chancellor. The Vice-Chancellor will be an honorary officer nominated by the Chancellor. The Senate will be the supreme authority, subject to the general control of the Government. It will be a body of 75 members, consisting partly of representatives of Government and of the general public, partly of elected representatives of the graduates and partly of teachers of the University and the constituent colleges, the latter being nominated by the Chancellor. The Syndicate will be the executive of the University, and will consist of the Vice-Chancellor, the Director of Public Instruction, a member of the Senate nominated by the Chancellor, four Principals of colleges, the Deans of the Faculties, and three members elected by the Senate from among their own number, of whom not more than one shall be a member of the teaching staff. The Chancellor's nominee on the Syndicate should be a person possessed of general administrative experience. In both these bodies the members of the teaching staff will predominate.

"After careful consideration, we have arrived at the conclusion that a university possessing the wide administrative and educational powers which we propose must be governed by a body in which professional and expert opinion will predominate. This we think we have secured by giving the members of the teaching staff a predominant voice in the counsels of the University.

"We recommend that the University shall contain, at its inception, Faculties of Arts, Law and Science, and a department for the training of teachers subordinate to the Faculty of Arts. We have considered the question of establishing a Faculty of Agriculture. But in view of the necessity which the Government Department of Agriculture feels of pursuing a tentative policy for some years to come with regard to agricultural education, we feel that it would be inadvisable at the present juncture to suggest that the University should make provision for instruction in this branch knowledge. As to the Medical and Engineering

Schools, they are designed to meet certain special needs, and do not aim at providing courses of a university standard. It will be many years before the demand for higher courses will justify the establishment of Faculties in Medicine and Engineering."

Until recent years, the demand for education, primary or secondary, was satisfied by a few institutions in the larger towns, while in the whole of the rural districts primary education had to be pressed on an apathetic and even obstructive agricultural population. The new spirit of progress in recent years has quickened the public pulse and the efforts of Government to effect improved facilities have responded accordingly. Special grants from the Government of India, budget surpluses in recent years have largely been devoted to assisting the District Councils to overtake their arrears of primary school building. District Councils in general have allowed their zeal for education to carry them into programmes of development beyond their means.

### Medical

The medical and sanitary services of the province are respectively controlled by an Inspector-General of Civil Hospitals and a Sanitary Commissioner, the latter being assisted by a Sanitary Engineer. The medical department has progressed along comparatively stereotyped lines. A striking advance has been made in recent years with urban sanitation. The principal medical institutions are the Mayo Memorial Hospital at Nagpur, opened in 1874, with accommodation for 80 in-patients, the Victoria Hospital at Jubbulpore, opened in 1886 and accommodating 64 in-patients, the Lady Dufferin Hospitals at Nagpur and Raipur and the Lady Elgin Hospital at Jubbulpore, these last three being for women and containing together accommodation for 64 in-patients. The province has two lunatic asylums, at Nagpur and Jubbulpore respectively. Vaccination is compulsory in some Municipal towns to which the Vaccination Act has been extended. The administration in 1913 sanctioned the opening of peripatetic dispensaries in unhealthy areas.

### Administration

Chief Commissioner, Sir B. Robertson, KCSI, CIE, apptd 3rd Aug 1912

Personal Assistant, D. G. Watson.

Chief Secretary, J. T. Martan, MA, ICS

Registrar, R. W. Johnson

Secretary, Public Works Department, (Irrigation Branch) A. J. Wadley

Financial Commissioner, H. A. Crump

Commissioner of Settlements and Director of Land Records, H. E. Hemingway, ICS

### BERAR

Commissioner, F. G. Sly, CSI

### Members of Council

#### NOMINATED MEMBERS

Mr Henry Ashbrooke Crump, CSCI, ICS

„ Bertram Percor Standen, CIE, ICS

„ John Thomas Martan, ICS

„ H. F. Ellwood Bell, BA, ICS

„ John Hullah, ICS

<i>Mr. J. H. L. Mullay</i> , ICS	R Temple ( <i>Officiating</i> )	1862
<i>Colonel H. B. L. C. Mier</i>	Colonel K Elliot	1863
<i>Col. G. W. Patrick Dennis</i> , CIE	J S Campbell ( <i>Officiating</i> )	1864
<i>Mr. E. H. Moss</i> , Kt., ICS	R Temple	1864
<i>Mr. F. H. Mayhew</i>	J S Campbell ( <i>Officiating</i> )	1865
<i>Major Edmund Hemmings</i> , ICS	R Temple	1865
<b>NON OFFICIALS</b>	I H Morris- ( <i>Officiating</i> )	1867
<i>Sir J. A. Smith</i> , Bart.	G Campbell	1867
<i>Khan Bahadur Nawab Muhammad Salamuallah Khan</i> , CIE	I H Morris ( <i>Officiating</i> )	1868
<i>Dewan Bahadur Sir Kasturchand Datta</i> , CIE	Confirmed 27th May 1870	
<i>Lia Bahadur Sir Phipps Krishna Rao</i> , Kt., CIE	Colonel R H Keatinge, CSI ( <i>Offg</i> )	1870
<b>ELECTED MEMBERS</b>	I H Morris, CSI	1872
<i>Mr. Shyama Prasad Shrivastava</i> , B.A., LL.B.	C Grant ( <i>Officiating</i> )	1879
<i>Krishna Sahib Singh Naikmal</i> , B.A.	I H Morris, CSI	1879
<i>Mr. Morcharao Keshav Datt</i> , B.A., Bar at Law	W B Jones, CSI	1883
<i>Priyadarshi Nathuram Prasad</i>	C H T Crosthwaite ( <i>Officiating</i> )	1884
<i>Lia Bahadur Narayan Poo Kelkar</i>	Confirmed 27th January 1885	
<i>Lia Bahadur Liahun Dutt Shankar</i> , B.A.	D Fitzpatrick ( <i>Officiating</i> )	1885
<i>Lia Bahadur P. Ghogi</i> , Lia Phonsle	J W Neill ( <i>Officiating</i> )	1887
<i>Krishna Bahadur Ranginath Narindra Mudholkar</i> , B.A., LL.B.	A Mackenzie, CSI	1887
<i>Pao Bahadur Keshav Govind Dumbre</i> , B.A., LL.B.	R J Crosthwaite ( <i>Officiating</i> )	1889
<i>Mr. Moreparant Vithayalath Johe</i> , B.A., LL.B.	Until 7th October 1889	
<b>MICHELANTON'S APPOINTMENT-</b>	I W Neill ( <i>Officiating</i> )	1890
<i>Director of Public Instruction</i> , A G Wright, M.A.	A P MacDonnell, CSI	1891
<i>Inspector General of Police</i> , R M. Kulkarni, ICS	J Woodburn, CSI ( <i>Officiating</i> )	1893
<i>Chief Conservator of Forests</i> , Montague Hill, CIE, ILS	Confirmed 30th November 1893	
<i>Inspector General of Civil Hospitals</i> , Col G W P. Dennis, ICS	C J Laill, CSI, CIE	1895
<i>Sanitary Commissioner</i> , Major T G N Stokes, ICS	D C J Ibbetson, CSI	1898
<i>Commissioner of Excise, etc.</i> , A Myne, ICS	A H L Fraser, CSI ( <i>Officiating</i> )	1899
<i>Comptroller (Financial Dept.)</i> , J C Mitra	Confirmed 5th March 1902	
<i>Postmaster General</i> , H A Sam	J P Hewett, CSI, CIE ( <i>Officiating</i> )	1902
<i>Director of Agriculture and Industries</i> , C G Littlejohn, ICS	Confirmed 2nd November 1903	
<i>Registrar of Co-operative Credit Societies</i> , H R Crosthwaite	F S P Leiv, CSI ( <i>Officiating</i> )	1904
	Confirmed 23rd December 1904	
<b>CHIEF COMMISSIONERS</b>	T O Miller, CSI	1905
<i>Colonel K. Elliot</i>	S Ismay, CSI ( <i>Officiating</i> )	1906
<i>Lieut. Colonel J K Spence</i> ( <i>Officiating</i> )	Until 22nd October 1906	
	F A T Phillip ( <i>Officiating</i> )	1907
	Until 25th March 1907 Also from 20th May to 22nd November	1909
	R H Craddock, CSI	1907
	H A Crump ( <i>Officiating</i> )	1912
	M W Fox-Strangways, CSI ( <i>Sub pro-term</i> )	1912
	Sr B Robertson, KC SI, CIE	1912

# North-West Frontier Province.

The North-West Frontier Province, as its name denotes, is situated on the north-west frontier of the Indian Empire. It is in form an irregular strip of country lying north by east and south by west and may generally be described as the tract of country, north of Baluchistan, lying between the Indus and the Durand boundary line with Afghanistan. To the north it extends to the mountains of the Hindu Kush. From this range a long broken line of mountains runs almost due south, dividing the province from Afghanistan, until the Sulaiman Range eventually closes the south of the Province from Baluchistan. The greatest length of the province is 405 miles, its greatest breadth 279 miles and its total area about 39,000 square miles. The territory falls into three main geographical divisions: the Cis-Indus district of Hazara, the narrow strip between the Indus and the Hills, containing the Districts of Peshawar, Kohat, Banu and Dera Ismail Khan, and the rugged mountainous regions on the north and west between those districts and the border line of Afghanistan. Hazara and the four districts in the second division contain 13,418 square miles. The mountain regions, north and west, are occupied by tribes subject only to the political control of the Chief Commissioner in his capacity as Agent to the Governor-General. The area of this tract is roughly 25,500 square miles and in it are situated, from north to south, the political agencies severally known as the Malakand, Khyber, Kurram, Tochi and Wana Agencies. Each of the Deputy Commissioners of the five administered districts is responsible for the management of political relations with certain tribes or sections of the tribes across the frontier. A few hundred miles of the trans-border Territory are internally administered by the Political Agents, but the bulk of the trans-border population is free from any internal interference, so long as offences are not committed and so long as the tribes observe the conditions on which allowances are paid to many of them.

The area of the Province is a little more than half that of Bombay (excluding Sind and Aden) and amounts to more than three-fifths of the size of England without Wales. The density of population throughout the Province equals 98 persons to a square mile, but in the more favoured portions the pressure of population is much greater. In the Hazara District there are 207 persons to a square mile and in the trans-Indus plains tract the number is 152. The key to the history of the people of the N-W-F-P lies in the recognition of the fact that the valley of Peshawar was always more closely connected politically with Eastern Iran than with India, though in pre-Mahomedan times its population was mainly Indian by race. Early history finds the Iranians dominating the whole Indus valley. Then came the Greek invasion under Alexander the Great, in B.C. 327, then the invasions of the Sakas, and of the White Huns, and later, the two great waves of Muhammadan invasion. Last came the Sikh invasion, beginning in 1818. The Frontier Territory was annexed by the British in 1849 and placed under the control of the Punjab Government. Frequent

warfare occurred with the border tribes, but since the conclusion of peace with the Afridis in 1898, the whole border has been undisturbed except for the expedition against the Zakka Khel Afridis in 1908.

The division of the Frontier Province from the Punjab was frequently discussed, with the double object of securing closer and more immediate control and supervision of the Frontier by the Supreme Government and of making such alterations in the personnel and duties of frontier officials as would tend to the establishment of improved relations between the local British representatives and the independent tribesmen. The province was eventually removed from the control of the Punjab administration in 1901. To it was added the political charge of Dir, Swat and Chitral, the Political Agent of which had never been subordinate to the Punjab. The new Province was constituted under a Chief Commissioner and Agent to the Governor-General, with headquarters at Peshawar, in direct communication with the Government of India in the Foreign Department. In political questions there is no intermediary between the Chief Commissioner and the local officer, an arrangement designed to secure both prompt disposal of references and the utilisation of the expert knowledge of frontier conditions for which the head of the administration is selected.

## The People

The total population of the N-W-F-P (1911) is 3,819,027, made up as follows —

Hazara	603,028
Trans-Indus Districts	1,593,905
Trans-Border Area	1,622,094

This last figure is estimated. There are only 625 6 females per 1,000 males in the towns and 900 females per 1,000 males in rural areas. This disproportion of the sexes cannot at present be explained in the N-W-F-P any more than in other parts of Northern India, where it also appears. The discrepancy is greater here than in any other Province of India. There is no ground for believing that the neglect of girls in infancy has any effect in causing the phenomenon. On the other hand the female population has to face many trials which are unknown to men. The evils of unskilled midwifery and early marriage are among them. Both the birth and death-rates of the Province are abnormally low. The birth rate in the administered districts, according to the last annual official reports, was 35.1 and the death-rate 33.3. There were 122.5 male births for every 100 females. It is recognised that in this matter, and in regard to population generally, the registration of females may be defective, inasmuch as the Pathans, for whatever reasons, regards the birth of a daughter as a misfortune, the less said about which the better. The population is naturally increasing, but emigration reduces the net result.

The dominant language of the Province is Pashtu, and the population contains several lingual strata. The most important sections of the population, both numerically and by social position, are the Pathans. They own





Commissioner and Agent to the Governor-General in Council His staff consists of—

- (1) Officers of the Political Department of the Government of India
- (2) Members of the Provincial Civil Service
- (3) Members of the Subordinate Civil Service
- (4) Superintendents and Assistant Superintendents of Police
- (5) Officers recruited for the service of departments requiring special knowledge—Militia, Engineering, Education, Medicine and Forestry

The cadre posts reserved for officers coming under the first head above are —

Administration	Chief Commissioner & Agent to the Governor-General	5
	Secretary	
	Assistant Secretary	
	Personal Assistant	
	Revenue Commissioner and Revenue Secretary	
	Resident in Waziristan	1
	Deputy Commissioners	5
	Political Agents	4
	District Judges	2
	Assistant Commissioners and Assistant Political Agents	12
High Court and Divisional Judges	One Judicial Commissioner	3
	Two Divisional and Sessions Judges	

The districts under the Deputy Commissioners are divided into from two to five sub-collectorates, in charge of tahsildars, who are invested with criminal and civil and revenue powers, and are assisted by naib-tahsildars, who exercise only criminal and revenue powers. Some sub-divisions are in charge of Assistant or Extra Assistant Commissioners. The village community characteristic of some parts of India is not indigenous among the Pathans. Its place as a social unit is to some extent taken by the tribe, which is held together by the ties of kinship and ancient ancestry, real or imaginary. Modern municipal local government has been introduced in the towns. There are also district boards. The district is the unit for police, medical and educational administration and the ordinary staff includes a District Superintendent of Police, a Civil Surgeon, who is also the Superintendent of Jail and a District Inspector of Schools. The Province forms a single educational circle and only possesses one forest division, that of Hazara. There are four divisions of the Roads and Building Branch of the Public Works Department, each under an Executive Engineer. The Irrigation Department of the P W D is in charge

of the Chief Engineer, Irrigation, Punjab, who is also *ex-officio* Secretary to the Chief Commissioner. The administration of the civil police force of the districts is vested in an Inspector-General. There is a special force of Border military police. The revenue and expenditure of the Province are wholly Imperial. Of the Agencies only Kurram and Tochi Valley pay land revenue to the British Government. The revenue administration of all five administered districts is controlled by the Revenue Commissioner. For the administration of civil and criminal justice there are two Civil and Sessions divisions, each presided over by a Divisional and Sessions Judge. The Judicial Commissioner is the controlling authority in the Judicial branch of the administration, and his Court is the highest criminal and appellate tribunal in this Province. The principal officers in the present Administration are —

*Agent to Governor-General and Chief Commissioner*, Lieut-Col Sir G O Roos-Keppel, K O S I, K C I E, assumed charge, 4th June 1908

*Resident, Waziristan*, Sir J S Donald, C S I, K O I E

*Judicial Commissioner*, W P Barton, C I E, I O S

*Revenue Commissioner*, Lieut-Col D B Blake-way, C I E, I A

*Secretary to Chief Commissioner*, E H Kealy  
*Asst Secretary to Chief Commissioner*, G. Latimer

*Indian Personal Asst to Chief Commissioner*, Risaldar Moghal Baz Khan

*Inspecting Officer, Frontier Corps*, Lieut-Col J S Kembell, I A

*Secretaries, Public Works Department*, Col W J D Dundee, C I E, F W Carue

*Agency Surgeon and Administrative Medical Officer*, Lieut-Col T W Irvine, I M S

*Divisional and Sessions Judges*, Lieut-Col C F Minchin, D S O, I A, F P Rennie.

#### Political Agents

Major W J Keen, I A, Dir, Swat & Chitral

S E Pears, Khyber

J A O Fitzpatrick, Tochi

Major R Garratt, I A, Kurram

*Inspector-General of Police*, H A Close

*Director of Public Instruction*, J A Richey, M A

*Superintendent, Archaeological Survey*, Sir M A Stein, K O I E, P H D LITT D S O

#### Former Chief Commissioners

Lieut-Col H A Deane, C S I Died 7th July 1908

W R H Merk, C S I Officiating to 31st Oct 1910

The Province of Assam 61,682 square miles in area, includes the Assam Valley Division, the Surma Valley and Hills Division and the State of Manipur. It owes its importance to its situation on the north-east frontier of India. It is surrounded by mountainous ranges on three sides while on the fourth (the west) lies the Province of Bengal on to the plains of which it debouches the two valleys of the Brahmaputra and the Surma which form the plains of Assam. The two valleys are separated from each other by the Assam Range, which runs westward from the hills on the eastern border.

### Population

The total population of the province in 1911 was 7,098,857 of whom 12 millions were Mahomedans, 21 millions Hindus and 12 millions Christians. 40 per cent of the population speak Bengali, 22 per cent speak Assamese. Other languages spoken in the province are Hindi, Urdu and a great variety of languages classified under the general heading of the Tibeto-Chinese language. Owing to the great areas of waste and rivers the density of the province is only 115, which compared with that of most other parts of India, is low, but is more than double that of Burma.

### Agricultural Products

It has agricultural advantages for which it would be difficult to find a parallel in any part of India, climate, soil, rainfall and river systems all being alike favourable to cultivation. Rice is the staple food crop, about 4 million acres being devoted to this crop. Except in the Himalayan Tract irrigation is unnecessary. Jute and tea are the most important crops grown for export, the area under jute being generally about 40,000 acres, that under tea about 76,000 acres. In 1914 the total number of tea gardens was 712, the production being estimated at 208,227,000 lbs. Wheat and tobacco are also grown and about 10 square miles are devoted to sugarcane. The total area of 'reserved' forest is about 3,778 square miles and the unclassified state forests cover about 18,509 square miles.

### Meteorological Conditions

Rainfall is everywhere abundant, and ranges from 93 to 124 inches. The maximum is reached at Cherrapunji in the Khasi Hills, which is one of the wettest places in the world, having a rainfall of 455 inches. The temperature ranges from 59° at Sibsagar in January to 84° in July. Earthquakes of considerable severity have taken place, by far the worst being that which occurred in 1807.

### Land Tenures

Most of the actual cultivators of the soil usually hold direct from the State, and the area of land on which rent is paid is inconsiderable. A large part of Goalpara and of the more densely populated portions of Sylhet was however included in the permanent settlement of Bengal, and the system of land tenure in Cachar, and the existence of large estates on privileged rates of revenue in Kamrup have tended to produce a tenant class which at the 1901 census amounted to more than one-third of the total number of persons supported by agriculture. In the 1911 census a very marked

increase in tenancy throughout the Province is shown.

The Assam Labour and Emigration (Amendment) Bill was passed on the 24th March 1915. The Act carries with it the abolition of the recruiting contractor and the creation of a Labour Bureau to supervise recruiting.

### Mines and Minerals

The only minerals in Assam worked on a commercial scale are coal, limestone and petroleum oil. The most extensive coal measures are in the Naga Hills district where about 300,000 tons are raised annually and used mainly by the river steamers. There has been a very marked rise in recent years in the price of Assam coal which rose from under Rs. 5 per ton in 1912 to Rs. 7 in 1914. Limestone is quarried in the Khasi and Jaintia Hills, in Sylhet and in the Garo hills, 108,131 tons were quarried in 1914. Petroleum is worked only in Lakhimpur, the oil is rich in paraffin, and the chief products are light naphthas, kerosene and wax. The oil is sold locally, and the wax is exported, mainly to England. Lubricating oil is produced on the southern slopes of the Khasi Hills. The total output of oil from the wells was in 1914, over 4,688,000 gallons valued at Rs. 2,31,990.

An account of the petroleum occurrences in Assam was recently published in the memoirs of the Geological Survey of India. It states that the petroleum localities in this province are confined to a curved belt of country along the basins of the Brahmaputra and Surma. This belt is traceable over a distance of some 800 miles from N.E. Assam through Kachar and Chittagong to the Arakan coast, where it has a S.S.W. trend. It is roughly concentric with the trend of the Burmese oil belt, the distance between the two varying from 70 to 150 miles. Various parts of the Assam-Kachar-Chittagong-Arakan belt have been exploited in a primitive way, but there are only two properly worked fields of commercial importance, viz., those of Digboi and Bappa Pung, two localities only about a mile apart in N.E. Assam.

### Manufactures

Silk is manufactured in the Assam Valley, the weaving being done by the women. Cotton weaving is also largely practised by the women, and almost every house contains a loom, the cloth is being gradually displaced by imported goods of finer texture and colour. Boat building, brass and metal and earthenwares, tea manufacture and limestone burning are the other industries apart from agriculture, which itself employs about 84 per cent of the population. Assam carries on a considerable trade with the adjoining foreign tribes and countries. In 1913-14 the value of frontier trade registered was nearly Rs. 35 lakhs. Trade with Bhutan increased but imports from all other hill tribes decreased mainly owing to the discontinuance of returns of imported rubber.

### Communications

The trade of Assam is chiefly carried by river, but increasing use is being made of the Assam Bengal Railway which runs from the port of Chittagong to Silchar at the eastern

end of the Surma Valley. A branch of that line runs along the south of the Assam Valley from Gauhati to Tinsukia, a station on the Dibru-Sadiya Railway, and is connected with the Surma Valley branch by a line that pierces the North Cachar Hills, the points of junction being Lumding in the northern and Badarpur in the southern valley. The Eastern Bengal State Railway connects Assam with the Bengal system via the valley of the Brahmaputra. The excellence of its water communication makes Assam less dependent upon roads than other parts of India, but in recent years the road system has been developed and there is a trunk road through the whole length of the Brahmaputra Valley and an excellent road from Gauhati to Shillong. A large fleet of steamers maintained by the India General Steam Navigation Company and the Rivers Steam Navigation Company plies on the rivers of both valleys. A daily service of passenger boats runs from Goalundo to Dibrugarh.

### Finance

Gross receipts in 1913-14 rose from Rs 1,69,42,636 to Rs 1,70,04,311 and gross expenditure from Rs 1,44,18,765 to Rs 1,86,79,558. The provincial account opened with a balance of Rs 78,06,494 which included Imperial assignments for various purposes aggregating Rs 48,55,000. Receipts amounted to Rs 1,60,26,700, and expenditure to Rs 1,82,96,971. Further Imperial assignments, amounting to Rs 5,13,000, were received during the year and, with the unspent balance of the former assignments, accounted for Rs 36,93,000 out of the closing balance of Rs 55,36,223.

### Education

The latest census report shows that there are in the Province at present 4,118 educational institutions including two Arts Colleges with 163,250 pupils. Of the total population 333,672 are returned as literate. The distribution of literacy naturally varies considerably throughout the Province. The large number of immigrant coolies and of aboriginal tribes tends to lower the proportion of literates in the Brahmaputra Valley, and a comparatively high standard of literacy in the Hills is due mainly to the progress of education amongst the Khasis of whom a large proportion have been converted to Christianity. Amongst the Animists in the Hills the Lushais seem to have an extraordinary keenness for learning, which is the more remarkable, because the administration of their district dates from quite recent times. There are 4,578 public and private educational institutions, with 215,141 pupils, in the province.

### Administration

The province of Assam was originally formed in 1874 in order to relieve the Lieutenant-Governor of Bengal of part of the administration of the huge territory then under him. In 1903, as the result of further deliberations, it was decided to add to the small Province of Assam the eastern portion of its unwieldy neighbour and to consolidate those territories under a Lieutenant-Governor. The Province of Eastern Bengal and Assam as then constituted was again broken up on the 1st of April, 1912, the Eastern Bengal Districts

were united with the Bengal Commissionerships of Burdwan and the Presidency to form the Presidency of Bengal under a Governor in Council, Bihar, Chota Nagpur and Orissa were formed into a separate province, while the old Province of Assam was re-constituted under a Chief Commissioner.

The capital is Shillong, a town laid out with great taste and judgment among the pine woods on the slopes of the Shillong Range which rises to a height of 6,450 feet above the sea. It was destroyed in the earthquake of 1897 and has been rebuilt in a way more likely to withstand the shocks of earthquake.

*Chief Commissioner*, Sir Archdale Earle, F.C.I.E.  
*appointed 1st April, 1912*  
*Personal Asst R. C. R. Cumming*  
*Chief Secretary*, B. C. Allen  
*Second Secretary*, A. W. Botham  
*Secretary, Public Works Department*, F. O. Oertel  
*Officiating Inspector General of Registration* —  
 S. N. Mackenzie, I.C.S.  
*Judges*, F. J. Jeffries, J. F. Graham  
*Director of Public Instruction*, J. R. Cunningham  
*Inspector-General of Police*, Lt.-Col. A. E. Woods  
*Sanitary Commissioner*, Major T. C. M. Young, M.B.E.  
*Comptroller, Financial Department*, W. A. T. (andul)  
*Political Agent in Manipur*, Lt.-Col. H. W. G. Cole, C.S.I.  
*Superintendent and Remembrancer of Legal Affairs* — Abdul Majid, B.A.  
*Director of Land Records and Agriculture*, A. R. Edwards, B.A., I.C.S.  
*Superintendent, Archaeological Survey, Eastern Circle*, D. B. Spooner  
*Chief Inspector of Factories*, R. P. Adams

### LEGISLATIVE COUNCIL

F. O. Oertel, W. J. Reid, Lieut. Colonel D. Herbert, J. R. Cunningham, M.A., J. F. Graham, Abdul Majid, A. B. Hawkins, Raja Prabhat Chandra Barua, Ramani Mohan Das, Srijut Padmanath Barua, Col. H. E. Banatvala, B. C. Allen, A. W. Botham.

### Elected Members

Mr. C. L. Pringle, Maulvi Saifid Abdul Majid, Khan Bahadur, Maulvi Saifid Muhammad Sardulla, Babu Nehni Kanta Ray Dastidar, Rai Bahadur, Mr. Tarun Ram Phukan, Mr. Kamini Kumar Chanda, Sita Mohan Das Rai Bahadur, Mr. A. L. Playfair, Mr. H. Miller, Mr. H. B. Fox.

### Chief Commissioners of Assam

Colonel R. H. Keatinge, C.S.I.	1874
Sir S. C. Bailey, K.C.S.I.	1878
C. A. Elliot, C.S.I.	1881
W. E. Ward	1886
Dennis Fitzpatrick, C.S.I.	1883
J. Westland, C.S.I.	1887
J. W. Quinton, C.S.I.	1889
Brig.-General Sir H. Collett, K.C.B.	1891
W. E. Ward, C.S.I.	1891
C. J. Hall, C.S.I.	1894
H. J. S. Cotton, C.S.I.	1896
J. B. Fuller, C.S.I.	1900
J. B. Fuller, C.S.I.	1902
C. W. Bolton, C.S.I.	1903
Note — The Chief Commissionership of Assam was revived 1st April, 1912.	
Sir Archdale Earle, F.C.I.E.	1912

## Baschistan.

[illegible]

The country which is almost wholly mountainous, has a great belt of rain coming from the Sudd Koh with the hill, one of the southern ranges. It has from a warm and the dry season of which enters the Indus on the east and the Aral in S. on the north while on the north and west it meets its way to the inland lakes which form so large a feature of Central Asia. Scattered here and there are mountains of high chasms and are scattered with wild darts and stone photos the prevailing colour of which is a moor of reds. It fine the is a room in place of a level valley of considerable size in which irrigation enables much cultivation to be carried on and rich crops of all kinds to be raised.

The political connection of the British Government with Baluchistan commenced from the outbreak of the First Afghan War in 1839, it was traversed by the Army of the Indus and was afterwards occupied until 1842 to protect the British lines of communication. The districts of Kachl, Quetta and Mianwali were handed over to the Amir of Afghanistan and Political Officers were appointed to administer the country. At the close of the First Afghan War, the British withdrew and the districts were assigned to the Khan of Kalat. The founder of the Baluchistan Province as it now exists was Sir Robert Sandeman who broke down the close border system and welded the Baluch and Pathan Chiefs into a close confederacy. In the Afghan War of 1879 Pishin, Sibi, Haraid and Thal Chotiali were handed over by Kalat Khan to the British Government and retained at Sir Robert Sandeman's strenuous insistence.

## Industries

Baluchistan lies outside the monsoon area and its rainfall is exceedingly irregular and scanty. Shahriz which has the heaviest rainfall, records no more than 112 inches in a year. In the highlands few places receive more than 10 inches and on the plains the average rainfall is about 5 inches, decreasing in some cases to 3. The majority of the indigenous population are dependent for their livelihood on agriculture, provision and care of animals and transport. The Afghan and the Baluch, as a rule, cultivate their own lands. The Brahuis dislike agriculture and prefer a pastoral life. Previous to the advent of the British life and

may be a reason to come that the cultivator was fortunate if he reaped his harvest. The establishment of peace and security has been accordingly followed by a marked extension of agriculture which accounts for the increase in the number of the purely cultivating classes. The Morin Coat is famous for the quantity and quality of its fish and the industry is collectively developing. Fruit is extensively grown in the highlands and the export is increasing.

Limestone is reported in 157 schools with 110 schools. The mineral wealth of the province is believed to be considerable, but cannot be exploited until railways are developed. Coal is mined at Khosht on the Sind-Pishin railway and in the Bolan Pass, the output in 1914 being 8,24 tons. Chromite is extracted in the Quetta-Pishin District. Limestone is quarried in small quantities.

## Administration

The head of the local administration is the office of the *Amir Agha* to the Governor General and Chief Commissioner. Next in rank comes the *Jam* or Commissioner who advises the *Amir* to the Governor General in financial matters and generally controls the revenue administration. The keynote of administration in Emduchistan is self-government by the tribesmen as this may be by means of their *Jungs* or Councils of Elders along the ancient customary lines of tribal law the essence of which is the satisfaction of the aggrieved and the settlement of the feud not retaliation on the aggressor or the vindictive punishment of a crime. The district levies which number 2,000 odd play an unobtrusive but invaluable part in the work of the Civil Administration not only in watch and ward and the investigation of crime but also in the carrying of the mails, the serving of process and other miscellaneous work. In addition to these district levies there are three irregular Corps in the Province, the *Zhob Militia* (formerly known as the *Zhob Levy Corps*), the *Makran Levy Corps* and the *Chagai Levy Corps*. Their combined strength in the latest returns was 953 cavalry and 892 infantry. The Province does not pay for itself and receives large subsidies from the Imperial Government. The receipts and expenditure roughly balance each other at 25½ lakhs.

## ADMINISTRATION

Agent to the Governor-General and Chief Commissioner, The Honble Lieut-Colonel Sir John Ramsay, K C I E, C S I, I A  
Revenue and Judicial Commissioner, Lieut Colonel C Archer, C S I, C I E  
Secretary Public Works Department, Lieut Colonel H S Murray, R F  
First Assistant to the Agent to the Governor-General and Secretary to the Chief Commissioner, Brav, Denis de S, I C S  
Second Assistant to the Agent to the Governor-General, A N L Cater I C S  
Political Agent, Zhob, Jacob, Major, A L, I A  
Assistant Political Agent, Zhob, Capt T G M Harris  
Political Agent, Kalat o'd Bolan Pass, Dew, Lieut-Colonel A B C I E I A

*Assistant Political Agent, Kalat and Bolan Pass,*  
C H Gidney, I C S

*Assistant for McRran to the Political Agent in Kalat and, ex-officio Commandant, McRran Levy Corps, Captain S Williams, I A*

*Political Agent, and Deputy Commissioner, Quetta and Pishin, Lieut-Colonel A McConaghey, C I E*

*Assistant Political Agent and Assistant Commissioner, Quetta and Pishin, Major H B Sh John, C I E, I A*

*Political Agent, Chagai, Major W G Hutchinson, I A*

*Political Agent and Deputy Commissioner, Sibi, Major F McCoparhev*

*Assistant Political Agent, Sibi, Major C D Bruce, I A*

*Political Agent, Loralai, Major A D G Ramsay*

*Assistant Political Agent, Loralai, Vacant*

*Residency Surgeon and Chief Medical Officer, Duke, Lieut-Colonel A L, I M S*

*Civil Surgeon, Quetta, Major W V Anderson*

## ANDAMAN AND NICOBAR ISLANDS.

This is a group of islands in the Bay of Bengal of which the headquarters are at Port Blair, by sea 780 miles from Calcutta, 740 miles from Madras and 360 miles from Rangoon, with which ports there is regular communication

The land area of the islands under the administration is 3,143 square miles, namely, 508 square miles in the Andamans and 635 square miles in the Nicobars. The total population of the islands was returned in the census of 1911 as 26,459. The islands are administered by the Chief Commissioner of the Andaman and Nicobar Islands who is also the Superintendent of the Penal Settlement. The penal settlement, which was established in 1858, is the most important in India.

*Superintendent of Port Blair, Lieut-Col M W Douglas, C I E*

*Commandant and District Superintendent of Military Police, Captain H W Rowlandson*

*Medical Superintendent of Quils, and Senior Medical Officer, Major J. H. Murray, I M S*

## COORG

Coorg is a small petty Province in Southern India west of the State of Mysore. Its area is 1,582 square miles and its population 174,976. Coorg came under the direct protection of the British Government during the war with Sultan Tipu of Seringapatam. In May 1834, owing to misgovernment, it was annexed. The Province is directly under the Government of India and administered by the Chief Commissioner of Coorg who is the Resident in Mysore with his headquarters at Bangalore. In him are combined all the functions of a local government and a High Court. The Secretariat is at Bangalore where the Assistant Resident is styled Secretary to the Chief Commissioner of Coorg. In Coorg his chief authority is the Commissioner whose headquarters are at Mercara and whose duties extend to every branch of the administration. The chief wealth of the country is agriculture and especially the growth of coffee. Although owing to over-production and insect pests coffee no longer commands the profits it once enjoyed, the Indian output still holds its own against the severe competition of Brazil. The bulk of the output is exported to France.

*Resident and Chief Commissioner, Coorg, The Hon Lt-Col Sir Hugh Daly, K C I E*

## AJMER-MERWARA.

Ajmer-Merwara is an isolated British Province in Rajputana. The Agent to the Governor-General in Rajputana administers it as Chief Commissioner. The Province consists of two small separate districts, Ajmer and Merwara, with a total area of 2,711 square miles and a population of 501,395. At the close of the Pindari war Daulat Rao Scindia, by a treaty dated June 25, 1818, ceded the district to the British. Fifty-five per cent of the population are supported by agriculture, the industrial population being principally employed in the cotton and other industries. The principal crops are maize, millet, barley, cotton, oil-seeds and wheat.

*Agent to the Governor-General in Rajputana and Chief Commissioner of Ajmer-Merwara, The Hon Lieut-Col Sir E G Colvin, K C S I*

Aden was the first new territory added to the Empire after the accession of Queen Victoria. It was acquired in 1839, was the outcome of an enterprise commended by the local Pashah chief of the Persians and crew of a British bugle, who was killed in the neighbourhood. Various acts of treachery supervened during the negotiations, but the British bought out the Persians and Aden was captured by a force sent by the Bombay Government under Major Pailton. The act has been justified as one of those opportune political strokes which have given geographical continuity to British possessions scattered over the world.

Aden is an extinct volcano five miles long and three broad, but it is not so much as Gibraltar. It is a low island, a circumference of about 15 miles, and connected with the mainland by a narrow isthmus of flat ground. This is nearly covered at one part at high spring tides, but the causeway and aqueduct are always above, though some times only just above water. The highest part of the wall of precipitous hills that surround the old crater which constitutes Aden is 1777 ft above sea level. Round a spur with a valley between a radial fault the centre to the circumference of the crater. A great gap has been rent by some volcanic disturbance on the sea surface of the circle of hills and this opens to the magnificent harbour. The peninsula of Little Aden, adjacent to Aden proper, was obtained by purchase in 1865 and the adjoining tract of Shukh Othman, 29 square miles in extent, was subsequently purchased when in 1882 it was found necessary to make provision for an ever flowing population.

Attached to the settlement of Aden are the islands of Perim, an island of 5 square miles, extent in the Straits of Bab-el Mandeb, in the entrance to the Arabian Sea, Sokatra Island, at the entrance to the Gulf of Aden, in the Arabian Sea, acquired by treaty in 1856 and 1,782 miles in extent, and the five small Kuria Muria Islands, ceded by the Imam of Maskat in 1851 for the purpose of landing the Red Sea cable, and otherwise valuable only for the guano deposits found upon them. They are off the Arabian coast about two thirds of the way from Aden to Maskat. The whole extent of the Aden settlement including Aden, Little Aden, Shukh Othman and Perim is approximately 80 miles. The 1911 census shows Aden, with Little Aden, Shukh Othman, and Perim to have a population of 40,165. The population of Perim is a matter of a few hundreds, largely dependent on the Coal Depot maintained there by a commercial firm. That of Sokatra is 12,000, mostly pastoral and migratory inland, fishing on the coast.

### Strategic Importance

Aden's first importance is as a naval and military station of strategic importance. This aspect was fully discussed by Colonel A. M. Murray, in his "Imperial Outposts." He points out that Aden is not a naval base in the same sense that Gibraltar, Malta and Hong Kong were made, but a *point d'appui*, a rendezvous and striding point for the fleet. It was seized in 1839 because of its usefulness as a harbour of refuge for British ships and from a strategist's point of view this is its primary purpose and the *raison d'être* of its forts and garrison. Aden

under British rule has retained its ancient prestige as a fortress of impregnable strength, invulnerable by sea and by land, dominating the entrance to the Red Sea, and valuable to its owners as a commercial emporium, a port of call and a cable centre. The harbour extends 8 miles from east to west and 4 from north to south and is divided into two bays by a spit of land. The depth of water in the western bay is from 3 to 4 fathoms across the entrance 4½ to 5 fathoms, with 10 to 12 fathoms 2 miles outside. The bottom is sand and mud. There are several islands in the inner bay. Strategic control of the Red Sea was rendered complete by the annexation of Perim and Sokatra, which may both be regarded as outposts of Aden, and are under the political jurisdiction of the Resident.

The Arab chiefs of the hinterland of Arabia are nearly all stipendiaries of the British Government. Colonel Wahab and Mr G. H. Fitzmaurice of the Constantinople Embassy, were appointed in 1902 as Commissioners to delimitate the frontier between Turkish Arabia and the British protectorate around Aden. A convention was signed in 1905 settling details, the frontier line being drawn from Shaikh Murad, a point on the Red Sea coast opposite Perim, to the bank of the river Bana, the eastern limit of Lurich claims, at a point some 29 miles north-east of Dthala and thence north-east to the great desert. The area left within the British Protectorate was about 9,000 square miles. The arrangement gave to Turkey Cape Bab-el Mandeb which forms the Arabian bank of the eastern channel past Perim into the Red Sea. England took this gatepost of the Red Sea from the Turks in November 1914. A sanatorium and small British garrison used to be maintained at Dthala, which is 7,700 feet high, but the garrison was withdrawn in 1906, Lord Morley explaining this step as being in accordance with the policy stated in the House of Lords in 1903,—that His Majesty's Government had never desired to interfere with the internal and domestic affairs of the tribes on the British side of the boundary, but had throughout made it plain that they would not assent to the interference of any other Power with those affairs.

### British Policy

There has been much criticism of a policy under which Aden has failed to advance with the same progressive strides which have marked the development of other British dependencies. It is said that the former Persian possessors of Aden built its wonderful water tanks, and the Arabs made an aqueduct 20 miles long, while the British have done nothing except mount guns to protect their coal yards. Trade, it is argued, flourishes because this is a natural emporium of commerce, but not because of the attention its needs get from Government. Lord Roberts, writing on this point a few years ago said, "It is not creditable to British rule to make use of a dependency like Aden for selfish purposes of political necessity without attempting to extend the benefits of civilised Government to the neighbouring native tribes, especially when those tribes are living under the aegis of the British Crown." The Persians, the Turks and even the Arabs did more for Aden in

their time than we have done during our seventy years' occupation. Aden has always suffered under the disadvantage of being an appanage of the Bombay Presidency, with which it has neither geographical, racial nor political affinity. Probably the best solution of the matter would be to hand over the place to the Colonial Office, relieving the Government of Bombay of a charge which is only looked upon as an incubus. Some important steps have been taken in the past few years to satisfy the commercial needs of the port.

### Trade

The trade of Aden has developed immensely since British acquisition in 1839, largely through the Government of India declaring it a free port in 1850, since when it has attracted much of the valuable trade between Arabia and Africa, formerly monopolised by the Red Sea ports of Hodeida and Mokha. The opening of the Suez Canal was also responsible for a large increase of trade through Aden into the interior. The total imports by sea in the last official year (1913-14) before the war set the course of progress awry amounted to £3,756,964, by land £170,213, treasure, £450,305, exports by sea were £3,267,283, by land, £140,159, treasure, £741,687. These statistics are exclusive of Government stores and treasure.

The language of the settlement is Arabic, but several other Asiatic tongues are spoken. The population is chiefly returned as Arabs and Shaikhs. The Somalis from the African coast and Arabs do the hard labour of the port. So far as the settlement is concerned there are no products whatever, with the important exception of salt. The crops of the tribal low country joining are jowar, sesamum, a little cotton, madder, a bastard saffron and a little indigo. In the hills, wheat, madder, fruit, coffee and a considerable quantity of wax and honey are obtained. The water supply forms the most important problem. Water is drawn from four sources—wells, aqueducts, tanks or reservoirs and condensers.

### Administration

The Aden settlement is subject politically to the Government of Bombay and its administration is conducted by a Resident, who is assisted by four Assistants. The Resident is also military Commandant and is usually an officer selected from the Indian army, as are his assistants. The Resident has jurisdiction as a Judge of the Vice-Admiralty Court in matters connected with slave trading, his court being called the Colonial Court of the Admiralty. The laws in force in the settlement are generally speaking those in force in the Bombay Presidency, supplemented on certain points by special regulations to suit local conditions. The management of the port is under the control of a Board of Trustees formed in 1888. The principal business of the Port Trust has been the deepening of the harbour, so as to allow vessels of all sizes to enter and leave at all states of the tide. The

Aden police force numbers slightly over 200 men. There are hospitals, and dispensaries in both Aden and Perim, in addition to the military institutions of this character. The garrison comprises a troop of engineers, three companies of garrison artillery, one battalion of British infantry, two companies of sappers and miners and one Indian regiment. Detachments from the last named are maintained at Perim and Shaikh Othman respectively.

The average temperature of the station is 87 degrees in the shade, the mean range being from 75 in January to 98 in June, with variations up to 102. The lulls between the monsoons, in May and September are very oppressive. Consequently, long residence impairs the faculties and undermines the constitution of Europeans and even Indians suffer from the effects of too long an abode in the settlement, and troops are not posted in the station for long periods, being usually sent there one year and relieved the next. But Aden is exceptionally free from infectious diseases and epidemics, and the absence of vegetation, the dryness of the soil and the purity of the drinking water constitute efficient safeguards against many maladies common to tropical countries. The annual rainfall varies from  $\frac{1}{4}$  inch to 8  $\frac{1}{2}$  inches, with an irregular average of 3 inches.

At the outset of the war the Turks established themselves on the Arabian shore of the straits of Babel Mandeb. They were driven off, their fort captured and then guns taken, by a force landed from a British warship. But in July last year a mixed force of Turks and Arabs advanced against the Aden Settlement. News was made known in India by a Reuter telegram of July 9th, which said that the Turks and Arabs threatened Lahej, that at the request of the Sultan of Lahej a force was sent for the protection of his capital, and that the supporting force was so beset with water and transport difficulties that it was decided to retire, and the whole force withdrew to Aden, the enemy declining to follow. Subsequently came an official intimation that the Sultan of Lahej who had been grievously wounded in a fight against the raiding force had died in Aden whither he had been taken for surgical treatment. The Government of India announced on July 22nd, that on the morning of the 21st instant a force from the Aden Garrison attacked the position taken by the Turks, a few miles outside the settlement, and drove them from it, the pursuit being continued for a distance of five miles.

The following are the principal officers of the present administration—

*Political Resident*, Brig-General C. H. K. Price, C.B., D.S.O.

*Assistant Residents*, Lieut-Colonel M. T. Elderton (Perim), Lieut-Colonel H. F. Jacob, Lieut-Colonel J. K. Condon, (on furlough) Captain B. R. Reilly, Lieut-Colonel W. Beale, Capt. A. H. A. Mosse.

The area enclosed within the boundaries of India is 1,778,168 square miles, with a population of 315,132,537 of people—nearly one-fifth of the human race. But of this total a very large part is not under British Administration. The area covered in the Native States is 675,267 square miles with a population of seventy millions. The Native States embrace the widest variety of country and jurisdiction. They vary in size from petty states like Lawa, in Rajputana, with an area of 19 square miles, and the Simla Hill States, which are little more than small holdings, to States like Hyderabad, as large as Italy, with a population of thirteen millions. They include the inhospitable regions of Western Rajputana, Baroda, part of the Garden of India, Mysore, rich in agricultural wealth, and Kashmir, one of the most favoured spots on the face of the globe. In the case of 175 States control is exercised by the Government of India, and of about 500 by the Provincial Governments. The four principal states, Hyderabad, Mysore, Baroda and Kashmir, are in direct relation with the Government of India. The other States are grouped under the direction of an Agent to the Governor-General, as for Rajputana and Central India, in one case the Provincial Government has been compelled to group its States, those of Kathiawar, under an Agent to the Governor.

## Relations with the Paramount Power

So diverse are the conditions under which the Native States were established and came into political relation with the Government of India, that it is impossible even to summarise them. But broadly it may be said that as the British boundaries expanded, the states came under the influence of the Government and the rulers were confirmed in their possessions. To this general policy however there was, for a brief period, an important departure. During the regime of Lord Dalhousie the Government introduced what was called annexation through lapse. That is to say, when there was no direct heir, the Government considered whether public interests would be secured by granting the right of adoption. Through the application of this policy, the states of Satara and of Nagpur fell in to the East India Company, and the kingdom of Oudh was annexed because of the gross misgovernment of its rulers. Then came the Mutiny. It was followed by the transference of the dominions of the East India Company to the Crown, and an irrevocable declaration of policy toward the Native States. In the historic Proclamation of Queen Victoria it was set out that "We desire no extension of our present territorial possessions, and while we will permit no aggression on our dominions or our rights to be attempted with impunity, we shall allow no encroachments on those of others. We shall respect the rights, dignity and honour of the Native Princes as our own, and we desire that they, as well as our own subjects, should enjoy that prosperity and that social advancement which can only be secured by internal peace and good government." Since the issue of that proclamation there has been no encroachment on the area under Native rule by the Government of India. On the contrary, the movement has been in the op-

posite direction. In 1881 the State of Mysore, which had been so long under British administration that the traditions of Native rule were almost forgotten, was restored to the old Hindu ruling house. In 1911 the Maharajah of Benares, the great taluqdar of Oudh, was granted ruling powers over his extensive possessions. On many occasions the Government of India has had to intervene, to prevent gross misgovernment, or to carry on the administration during a long minority, but always with the undeviating intention of restoring the territories as soon as the necessity for intervention passed. Almost all states possess the right of adoption in default of heirs.

## Rights of Native States

The rights and obligations of the Native States are thus described by the Imperial Gazetteer. The Chiefs have, without exception, gained protection against dangers from without and a guarantee that the protector will respect their rights as rulers. The Paramount Power acts for them in relation to foreign Powers and other Native States. The inhabitants of the Native States are the subjects of their rulers, and except in case of personal jurisdiction over British subjects, these rulers and their subjects are free from the control of the laws of British India. Criminals escaping to a Native State must be handed over to it by its authorities, they cannot be arrested by the police of British India without the permission of the ruler of the State. The Native Princes have therefore a suzerain power which acts for them in all external affairs, and at the same time scrupulously respects their internal authority. The suzerain also intervenes when the internal peace of their territories is seriously threatened. Finally they participate in all the benefits which the protecting power obtains by its diplomatic action, or by its administration of its own dominions, and thus secure a share in the commerce, the railways, the ports, and the markets of British India. Except in rare cases, applied to maritime states, they have freedom of trade with British India although they levy their own customs, and their subjects are admitted to most of the public offices of the British Government.

## Obligations of Native States

On the other hand the Native States are under an obligation not to enter into relations with foreign nations or other states, the authority of their rulers has no existence outside their territories. Their subjects outside their dominions become for all intents and purposes British subjects. Where foreign interests are concerned, the Paramount Power must act so that no just cause of offence is given by its subordinate allies. All Native States alike are under an obligation to refer to the British every question of dispute with other states. Inasmuch as the Native States have no use for a military establishment other than for police, or display, or for co-operation with the Imperial Government, their military forces, their equipment and armament are prescribed by the Paramount Power. Although old and unaltered treaties declare that the British Government will have no manner of concern with any of a Maharajah's dependents or servants, with respect to whom the Maharajah is absolute, logic and public opinion



have endorsed the principle which Lord Canning set forth in his minute of 1860, that the "Government of India is not precluded from stepping in to set right such serious abuses in a Native Government as may threaten any part of the country with anarchy or disturbance, nor from assuming temporary charge of a Native State when there shall be sufficient reason to do so." Of this necessity the Governor-General in Council is the sole judge, subject to the control of Parliament. Where the law of British India confers jurisdiction over British subjects or other specified persons in foreign territory, that power is exercised by the British courts which possess it. The subjects of European Powers and the United States are on the same footing. Where cantonments exist in Native territory, jurisdiction both over the cantonment and the civil station is exercised by the suzerain power.

### Political Officers

The powers of the British Government are exercised through Political Officers who as a rule reside in the states themselves. In the larger states the Government is represented by a Resident, in groups of states by an Agent to the Governor-General, assisted by local Residents or Political Agents. These officers form the sole channel of communication between the Native States and the Government of India and its Foreign Department, with the officials of British India and with other Native States. They are expected to advise and assist the Ruling Chiefs in any administrative or other matters on which they may be consulted. Political Agents are similarly employed in the larger States under the Provincial Governments, but in the petty states scattered over British India the duties of the Agent are usually entrusted to the Collector or Commissioner in whose district they lie. All questions relating to the Native States are under the special supervision of the Supreme Government, and in the personal charge of the Governor-General. A proposal has been made by the Government of India that, in view of the increasing importance of the Native States, an additional Secretary, styled the Political Secretary, shall be appointed who shall be in special charge, under the Viceroy, of these questions.

### Closer Partnership

Events have tended gradually to draw the Paramount Power and the Native States into closer harmony. Special care has been devoted to the education of the sons of Ruling Chiefs, first by the employment of tutors, and afterwards by the establishment of special colleges for the purpose. These are now established at Ajmere, Rajkot, Indore and Lahore. The Imperial Cadet Corps whose headquarters are at Dehra Dun, imparts military training to the scions of the ruling chiefs and

noble families. The spread of higher education has placed at the disposal of the Native States the products of the Universities. In these ways there has been a steady rise in the character of the administration of the Native States, approximating more closely to the British ideal. Most of the Native States have also come forward to bear their share in the burden of Imperial defence. Following on the spontaneous offer of military assistance when war with Russia appeared to be inevitable over the Pongh incident in 1885, the states have raised a portion of their forces up to the standard of the Native troops in the Indian Army. These are termed Imperial Service Troops, they belong to the states, they are officered by Indians, but they are inspected by a regular cadre of British officers, under the general direction of the Inspector General of Imperial Service Troops. Their numbers are approximately 22,000 men, their armament is the same as that of the Indian Army and they have done good service often under their own Chiefs on the Frontier and in China and in Somaliland. Secure in the knowledge that the Paramount Power will respect their rights and privileges, the Ruling Chiefs have lost the suspicion which was common when their position was less assured, and the visits of the Prince of Wales in 1875, of the Prince and Princess of Wales in 1905-06, and of the King and Queen in 1911-12 have tended to seal the devotion of the great feudatories to the Crown. The improvement in the standard of native rule has also permitted the Government of India largely to reduce the degree of interference in the internal affairs of the Native States. The new policy was authoritatively laid down by Lord Minto, the then Viceroy, in a speech at Udaipur in 1909, when he said —

"Our policy is with rare exceptions, one of non interference in the internal affairs of the Native State. But in guaranteeing their internal independence and in undertaking their protection against external aggression it naturally follows that the Imperial Government has assumed a certain degree of responsibility for the general soundness of their administration and could not consent to incur the reproach of being an indirect instrument of misrule. There are also certain matters in which it is necessary for the Government of India to safeguard the interests of the community as a whole as well as those of the paramount power, such as railways, telegraphs and other services of an Imperial character. But the relationship of the Supreme Government to the State is one of suzerainty. The foundation-stone of the whole system is the recognition of identity of interests between the Imperial Government and Durbars and the minimum of interference with the latter in their own affairs."

## HYDERABAD

Hyderabad, the premier Native State in India, is in the Deccan. Its area is 82,698 square miles and population 13,374,676. The general physical characteristics of the State are an elevated plateau, divided geographically and ethnologically by the Mahanadi and Godavari rivers. To the North-West is the Trappean region, peopled by Marathas, a country of black cotton soil,

producing wheat and cotton. To the South East is the granitic region of the Telugus and producing rice.

**HISTORY**—In pre-historic times Hyderabad came within the great Dravidian zone. The date of the Aryan conquest is obscure, but the dominions of Asoka 272 to 231 B.C. embraced the northern and western portions of the State.

Three great Hindu dynasties followed those of the Pallavas, Chalukyas and Yadavas. In 1294 the irruption of the Mahomedans under Ala-ud-din Khilji, commenced, and thenceforward till the time of Aurungzebe the history of the State is a confused story of struggles against the surviving Hindu kingdom of the South, and after the fall of Vijayanagar, with each other. Aurungzebe stamped out the remains of Mahomedan independence of the South and set up his General Asaf Jah of Turcoman descent as Viceroy, or Subhedar of the Deccan in 1713. In the chaos which followed the death of Aurungzebe, Asaf Jah had no difficulty in establishing and maintaining his independence, and thus founded the present House. During the struggle between the British and the French for mastery in India, the Nizam finally threw in his lot with the British, and unshaken even by the excitement of the mutiny, has been so staunch to his engagements as to earn the title of 'Our Faithful Ally'. The present ruler is H. H. Sir Usman Ali Khan Bahadur Fateh Jung, C.S.I.

**THE BERARS**—A most important event in the history of the State occurred in November 1902, when the Assigned Districts of Berar were leased in perpetuity to the British Government. These districts had been administered by the British Government on behalf of the Nizam since 1853, under the treaties of 1853 and 1860 they were "assigned" without limit of time to the British Government to provide for the maintenance of the Hyderabad contingent, a body of troops kept by the British Government for the Nizam's use; the surplus revenues if any, being payable to the Nizam. In course of time it had become apparent that the maintenance of the Hyderabad contingent on its old footing as a separate force was inexpedient and unnecessary, and that similarly the administration of Berar as a separate unit was very costly, while from the point of view of the Nizam, the precarious and fluctuating nature of the surplus was financially inconvenient. The agreement of 1902 re-affirmed His Highness' sovereignty over Berar, which instead of being indefinitely "assigned" to the Government of India, was leased in perpetuity to an annual rental of 25 lakhs (nearly £167,000), the rental is for the present charged with an annual debt towards the repayment of loans made by the Government of India. The Government of India were at the same time authorised to administer Berar in such manner as they might think desirable, and to redistribute, reduce, re-organise and control the Hyderabad Contingent, due provision being made, as stipulated in the treaty of 1853 for the protection of His Highness' dominions. In accordance with this agreement the Contingent ceased in March 1903 to be a separate force and was re-organised and redistributed as an integral part of the Indian Army, and in October 1903 Berar was transferred to the administration of the Chief Commissioner of the Central Provinces.

**ADMINISTRATION**—The Nizam is supreme to the State and exercises the power of life and death over his subjects. For convenience in administration the Minister is the chief controlling authority in the State. To assist him there are five Assistant Ministers: Financial, Judicial, Military, Public Works and Ecclesiastical. All questions of importance are referred to the

Council, which is composed of the Minister as President, and the Assistant Ministers as Members. Business disposed of by the Council is immediately reported to the Nizam. The actual work of the departments is done by six Secretaries. Below the Secretariat the State is divided into Subhs or Divisions, Districts and Talukas. Fifteen Districts, 86 Taluk and nine Divisional Boards are at work in the State. A Legislative Council, consisting of 21 members, of whom 13 are official and 8 non-official, is responsible for making laws. The State maintains its own currency, the Osmania Sicca rupee with a subordinate coinage. In 1904 an improved Mahabubia rupee was struck and this exchanges with the British rupee at the ratio of 115 or 116 to 100. It has its own postal system and stamps for internal purposes. It maintains its own Army, comprising 19,597 troops, of which 6,064 are classed as Regular and 13,533 as Irregular. There are in addition 696 Imperial Service Troops.

**FINANCE**—After many vicissitudes, the financial position of the State is strong. The current budget provides for a revenue of Rs. 521 lakhs and a service expenditure of Rs. 478 lakhs. The principal revenue heads are Land Revenue 279 lakhs, Berar rent (land leased in perpetuity to the British Government and incorporated in the Central Provinces) 25 lakhs, Custom, etc., 67 lakhs, Excise 86 lakhs, Interest 34 lakhs.

**PRODUCTION AND INDUSTRY**—The principal industry of the State is agriculture, which maintains 56 per cent of the population. The common system of land tenure is *rotwari*. As no reliable figures are available to show the gross produce it is impossible to say what proportion the land revenue bears to it, but it is collected without difficulty. The principal food crops are millet and rice, the staple money crops cotton, which is grown extensively on the black cotton soils, and oil-seeds. The State is rich in minerals. The great Warangal coal measures are worked at Singareni, but the efforts to revive the historic gold and diamond mines have met with very qualified success. The manufacturing industries are consequent on the growth of cotton and comprise three spinning and weaving mills and ginning and pressing factories in the cotton tracts.

**COMMUNICATIONS**—One hundred and thirty-seven miles of the broad gauge line from Bombay to Madras traverse the State. At Wadi, on this section, the broad gauge system of the Nizam's Guaranteed State Railway takes off running East to Warangal and South-East toward Bezwa, a total length of 310 miles. From Hyderabad the metre gauge Godavari Railway runs North-West to Manmad on the Great Indian Peninsula Company's system 391 miles. There are thus 471 miles of broad gauge and 391 of metre in the State. The Great Indian Railway owns a short extension to Latour. The roads are generally inferior.

**EDUCATION**—The State maintains two Colleges. The Nizam College at Hyderabad (first grade) is affiliated to the Madras University. The Oriental College at Hyderabad prepares students for the local Moulvi and Munshi examinations. There are 28 high schools, 63 middle schools, 917 primary schools and 24 special schools including a Medical School in the Dominions.

**British Resident**—The Hon. Lieut.-Col. Sir F. Paken, K.C.S.I., C.I.F.

## MYSORE

The State of Mysore is surrounded on all sides by the Madras Presidency except on the north and north-west where it is bounded by the districts of Dharwar and North Canara respectively and towards the south-west by Coorg. It is naturally divided into two regions of distinct character, the hill country (the Malnad) on the west and the wide-spreading valleys and plains (the Maidan) on the east. The State has an area of 29,461 square miles excluding that of the Civil and Military Station of Bangalore and a population of 5,705,350, of whom over 92 per cent are Hindus. Kanarese is the distinctive language of the State.

**HISTORY**—The ancient history of the country is varied and interesting. Tradition connects the table-land of Mysore with many a legend enshrined in the great Indian epics, the Ramayana and the Mahabharata. Coming down to historical times, the north-eastern portion of the country formed part of Asoka's Empire in the third century B.C. Mysore then came under the rule of the Andhra dynasty. From about the third to the eleventh century A.D. Mysore was ruled by three dynasties, the north-western portion by the Kadambas, the eastern and northern portions by the Pallavas and the central and southern portions by the Gangas. In the eleventh century, Mysore formed part of the Chola dominion, but the Cholas were driven out early in the twelfth century by the Hoysalas, an indigenous dynasty with its capital at Halebidu. The Hoysala power came to an end in the early part of the fourteenth century. Mysore was next connected with the Vijayanagar Empire. At the end of the fourteenth century, Mysore became associated with the present ruling dynasty. At first tributary to the dominant empire of Vijayanagar, the dynasty attained its independence after its downfall in 1565. In the latter part of the eighteenth century, the real sovereignty passed into the hands of Haider Ali and then his son Tipu Sultan. In 1799, on the fall of Seringapatam, the British Government restored the State comprised within its present limits, to the ancient dynasty in the person of Maharaja Sri Krishnaraja Wadiyar Bahadur III. Owing to the insurrections that broke out in some parts of the country, the management was assumed by the British Government in 1831. In 1881, the State was restored to the dynasty in the person of Sri Chamarajendra Wadiyar Bahadur under conditions and stipulations laid down in the Instruments of Transfer. That ruler, with the assistance of Mr (afterwards Sir) K. Seshadri Iyer, K.C.S.I., as Dewan, brought Mysore to a state of great prosperity. He died in 1894 and was succeeded by the present Maharaja Sri Sri Krishnaraja Wadiyar Bahadur, G.C.S.I., who was installed in 1902. In November 1913, the Instrument of Transfer was replaced by a Treaty which indicated more appropriately the relation subsisting between the British Government and the State of Mysore.

**ADMINISTRATION**—The city of Mysore is the capital of the State, but Bangalore City is the administrative head quarters. His Highness the Maharaja is the ultimate authority in the State and the administration is conducted under his control, by the Dewan and three

Members of the Council including the Extraordinary Member. The Chief Court consists of three Judges is the highest judicial tribunal in the State. A Representative Assembly meets once a year at Mysore when the Dewan places before them the annual statement of finances and the measures of the State after which representations are heard and considered. There is also a Legislative Council consisting of 25 members of whom 12 are officials, and 13 non-officials eight elected and five nominated. The Council has recently been given the privileges of interpellation and discussion of the State budget. All the important branches of the administration are controlled by separate heads of departments. For administrative purposes, the State is divided into 8 districts and subdivided into 68 talukas, each district being under a Deputy Commissioner and District Magistrate and each taluk under an Amildar and subordinate Magistrate. The State maintains a military force of 3,202 including 516 in the Imperial Service Regiment (Cavalry) and 480 in the Imperial Service Transport Corps.

**FINANCE**—The cash balance at the beginning of 1914-15 was Rs 101 lakhs. Total receipts during the year were Rs 278 lakhs and total disbursements Rs 313 lakhs. The principal revenue heads are Land Revenue Rs 103 lakhs, Mining Royalty and Leases Rs 21 lakhs, Forest revenue Rs 17 lakhs, Excise Rs 55 lakhs, Stamps Rs 11 lakhs, Railway Rs 13 lakhs, and Electric power and light Rs 7½ lakhs. Mysore pays an annual subsidy of 35 lakhs to the British Government.

**ECONOMIC CONFERENCES**—The Mysore Economic Conference was organised in June 1911 with the object of creating and keeping alive public interest in matters connected with the economic progress of the State by a frequent interchange of views and discussions among those competent to deal with them and in order to associate men of enlightenment, public spirited citizens, prominent agriculturists, merchants and others with the officers of Government in such deliberations. The Conference meets annually at Mysore during the festivities in connection with His Highness the Maharaja's birthday. It has three Central Committees dealing with questions connected with Agriculture, Education and Industries and Commerce and District Committees in the several districts.

**AGRICULTURE**—Nearly three-fourths of the population are employed in agriculture and the general system of land tenure is Ryotwari. The principal food crops are ragi, rice, jola, millets, gram and sugarcane and the chief fibres are cotton and san-hemp. Over 28,000 acres are under mulberry, the silk industry being the most profitable in Mysore next to gold mining. The Department of Agriculture which was recently reorganised on a large scale is popularising agriculture on scientific lines by means of demonstrations, investigations and experiments.

**INDUSTRIES**—A separate department of Industries and Commerce has been created with a view to improve the existing industries and to provide expert advice and other facilities for the starting of new industries in the State. The manufacturing industries include 12 cotton

ganning mills, 2 cotton presses, 2 cotton mills, 2 silk filatures and 2 woollen mills. There are also 4 oil mills, 11 rice mills, 9 sugar mills, 4 brick and tiles factories, 3 cigar factories, 3 tanneries, 15 mechanical workshops, 2 distilleries, 1 iron and steel works, 1 silk reeling house, 4 flour mills, 2 bone-meal factories, 3 coffee curing works, 3 dyeing factories, 2 breweries, 1 brewery, 12 iron and brass foundries, 1 lacquer work, 2 tanneries, 4 saw mills, 1 weaving factory, 1 pharmaceutical works, 1 soap factory, 1 wood turning and 1 lithographic press. In addition there are 38 pumping plants for irrigation. Besides, 30 mines were at work during 1914—15 for gold, 3 for manganese, 5 for chrome ore, 2 for mica and 5 for other minerals. The value of gold produced last year was nearly 324 lakhs.

**BANKING**—In 1913, a State-aided bank called the Bank of Mysore was started with its head quarters in Bangalore and agencies at many of the important places in the State. Besides this there is one central Co-operative Bank, one District Bank and 15 Federal Banking Unions and there are now 710 societies working.

**COMMUNICATIONS**—The Railway system radiates from Bangalore, various branches of the Madras and Southern Mahratta Railway running through the State. The length of the lines owned by the State and worked under contract by the Company is 411 17 miles, of which 988 are of broad gauge and the rest metre gauge. A District Board Railway from Bowringpet to Kolar (11 miles) was opened in December 1913. A Light Railway from Yelbhraka to Chikballapur and a Tramway from Tirikere to Narasimharajapura have also been opened. Several other projects have been prepared and good progress has been made on some of them.

**EDUCATION**—There are two first grade colleges, the Central College at Bangalore and the Maharaja's College at Mysore, both affiliated

to the Madras University. They have been efficiently equipped and organised and Honours courses in Physics and History and Economics have been recently instituted. There is also a training College for men and a College for women the Maharani's College at Mysore. Primary education has recently been made compulsory in certain selected areas. Schools have been started for imparting education in agricultural, commercial and technical subjects. There are 4263 public and 1,754 private educational institutions in the State. This gives one school to every 480 square miles of the area and to every 947 persons or the population of the State.

**PLACES OF INTEREST**—Mysore City, the capital, is a modern city laid out with fine roads and suburbs. The prominent buildings are the Palace, the Chamarajendra Technical Institute, Government House, the Maharaja's College, the Maharani's College and the Oriental Library.

Bangalore, the largest city in the State and the commercial and manufacturing centre, stands on a table land, 3,000 feet above the sea and is noted for its salubrious climate and luxuriant gardens. The principal places of interest are the Public Offices, the Central College buildings, the Museum, the Lal Bagh, the Indian Institute of Science and the Indian Sanskrit Institute.

The historic town of Srirangapatna, the famous Jog Falls, the Kolar Gold Fields, the Srirangamudram and Belur, Somnathpur and Halebidu with their temples of exquisite architecture, are some of the other important places of interest in the State.

*Resident and Chief Commissioner of Coorg*—The Hon'ble Lieut.-Col Sir Hugh Daly, K.C.I.E., C.S.I.

*Deewan*—Sir M. Visveswaraya, B.A., K.C.I.E.

## BARODA.

The State of Baroda is situated partly in Gujarat and partly in Kathiawar. It is divided into four distinct blocks: (1) the southern District of Navsari near the mouth of the Tapi river, and mostly surrounded by British territory, (2) central district, North of the Narmada, in which lies Baroda, the capital city, (3) to the North of Ahmedabad, the District of Kadi, and (4) to the West, in the Peninsula of Kathiawar, the district of Amreli, formed of scattered tracts of land. The area of the State is 8,182 square miles, the population is over two millions, of whom over four-fifths are Hindus.

**HISTORY**—The history of the Baroda State as such dates from the break-up of the Mughal Empire. The first Maratha invasion of Gujarat took place in 1705, and in this and later incursions Pilaji Gaikwar, who may be considered as the founder of the present ruling family, greatly distinguished himself. Songhad was the Head quarters till 1766. Since 1723 Pilaji regularly levied tribute in Gujarat. His son Damaji finally captured Baroda in 1734, since when it has always been in the hands of the Gaikwars, but Mughal authority in Gujarat did not end until the fall of Ahmedabad, in 1763, after which the country was

divided between the Gaikwar and the Peshwa. In spite of the fact that Damaji was one of the Maratha chiefs defeated at Panipat by Ahmed Shah, he continued to add to his territory. He died in 1768 leaving the succession in dispute between two rival sons. He was succeeded in turn by his sons Savaji Rao I, Fattessing Rao, Manaji Rao and Goraji Rao. The last died in 1800, and was succeeded by Anand Rao. A period of political instability ensued which was ended in 1802 by the help of the Bombay Government, who established the authority of Anand Rao at Baroda. By a treaty of 1805 between the British Government and Baroda, it was arranged *inter alia* that the foreign policy of the State should be conducted by the British, and that all differences with the Peshwa should be amicably arranged. Baroda was a staunch ally of the British during the wars with Bajji Rao Peshwa, the Pindari hordes and Holkar. But from 1820 to 1841, when Sayaji Rao II was Gaikwar, differences arose between the two Governments which were settled by Sir James Carnac, Governor of Bombay in 1841. Ganpat Rao succeeded Savaji Rao in 1847. During his rule, the political supervision of Baroda was transferred to the Supreme Go-

vernment His successor Khande Rao, who ascended the *Gadr* in 1856, introduced many reforms. He stood by the British in the Mutiny. He was succeeded by his brother Malhar Rao in 1870. Malhar Rao was deposed in 1875 for "notorious misconduct" and "gross misgovernment," but the suggestion that he had instigated the attempt to poison Col Playre, the Resident, was not proved. Sayaji Rao III, a boy of 13 years of age, who was descended from a distant branch of the family, was adopted as heir of Khande Rao in 1875 and is the present Gaikwar. He was invested with full powers in 1881.

**ADMINISTRATION**—An executive council, consisting of the principal officers of the State, carries on the administration, subject to the control of the Maharaja, who is assisted by a Dewan and other officers. A number of departments have been formed, which are presided over by officials corresponding to those in British India. The State is divided into four *prants* each of which is subdivided into *Mahals* and *Peta Mahals* of which there are in all 42. Attempts have for some years been made to restore village autonomy, and village panchayats have been formed which form part of a scheme for local self-government. There is a Legislative Department, under a Legal Remembrancer, which is responsible for making laws. There is also a Legislative Council, consisting of nominated and elected members. A High Court at Baroda possesses jurisdiction over the whole of the State and hears all final appeals from the decisions of the High Court, appeals lie in certain cases, to the Maharaja, who decides them on the advice of the Huzur Nyaya Sabha. The State Army consists of 5,084 Regular forces and 3,806 Irregular forces.

**FINANCE**—In 1913-14, the total receipts of the State were Rs 200 lakhs and the disbursements Rs 142 lakhs. The Principal Revenue heads were—Land Revenue, Rs 117 lakhs, Abkari, Rs 21 lakhs, Opium, Rs 23 lakhs, Railways, Rs 8 lakhs, Interest Rs 7 lakhs, Tribute from other States, Rs 2 lakhs. British Currency was introduced in 1901.

**PRODUCTION AND INDUSTRY**—Agriculture and pasture support 68 per cent of the people. The principal crops are rice, wheat, gram, castor-oil, rapeseed, poppy, cotton, san hemp,

tobacco, sugarcane, maize and garden crops. The greater part of the State is held on *ryotwari* tenure. The State contains few minerals except sandstone, which is quarried at Songir, and a variety of other stones which are little worked. There are 33 industrial or commercial concerns in the State registered under the State Companies' Act. There are five Agricultural Banks and 202 Co-operative Societies in Baroda.

**COMMUNICATIONS**—The B B & C I Railway crosses part of the Navsari and Baroda *prants*, and the Rajputana-Malwa Railway passes through the Kadi *prant*. A system of branch lines has been built by the Baroda Durbar in all the four *prants*, in addition to which the Japti Valley Railway and the Baroda Godhra Chord line (B B & C I) pass through the State. The Railways constructed by the State are 412 miles in length and 120 miles are under construction. Good roads are not numerous.

**EDUCATION**—The Education Department controls 3,088 institutions of different kinds, in 58 of which English is taught. The Baroda College is affiliated to the Bombay University. There are a number of high schools, technical schools, and schools for special classes, such as the jungle tribes and unclean castes. The State is "in a way pledged to the policy of free and compulsory primary education." It maintains a system of rural and travelling libraries. Ten per cent of the population is returned in the census as literate. Total expenditure on Education is about Rs 17 lakhs.

**CAPITAL CITY**—Baroda City with the cantonment has a population of 99,345. It contains a public park, a number of fine public buildings, palaces and offices, and it is crowded with Hindu temples. The cantonment is to the North-west of the city and is garrisoned by an Infantry battalion of the Indian Army. An Improvement Trust has been formed to work in Baroda City and has set itself an ambitious programme.

**RULER**—His Highness Farzand-i-Khas-i-Dowlat-i-Inglishia Maharaja Sir Savaji Rao Gaekwar Sena Khas Khel, Samsher Bahadur, GCSI, Maharaja of Baroda.

*Resident*—Lt-Col L Impey, CIE

*Dewan*—V P Madhao Rao, CIE (*Retired*)

## KASHMIR.

Kashmir (known to Indians as Jammu) lies to the east of the Indus and to the west of the Ravi. It is a mountainous country with just a strip of level land along the Punjab frontier, and intersected by valleys of which many are of surpassing beauty and grandeur. It may be divided physically into two areas, the north-eastern comprising the area drained by the Indus with its tributaries, and the south-western, including the country drained by the Jhelum, the Kishanganga and the Chenab. The dividing line between those two areas is the great central mountain range. The area of the State is 84,432 square miles, and the population 3,158,126.

**HISTORY**—Various poets have left more or less trustworthy records of the history of the valley down to 1586, when it was conquered by Akbar. Srinagar, the capital, had by then been long established, though many of the fine buildings erected by early Hindu rulers had been

destroyed by the Mahomedan kings who first appeared in the 12th century. In the reign of Sikandar the population became almost entirely Mahomedan. Akbar visited the valley three times. Jehangir did much to beautify it, but after Aurangzebe there was a period of disorder and decay, and by the middle of the eighteenth century the *Subah* of Kashmir was practically independent of Delhi. Thereafter it experienced the oppression of Afghan rule until it was rescued, in 1819, by an army sent by Ranjit Singh. Sikh rule was less oppressive than that of the Afghans. The history of the State as at present constituted is practically that of one man, a Dogra Rajput, Gulab Singh of Jammu. For his services to the Sikhs this remarkable man had been made Raja of Jammu in 1820, and he added largely to his territory by conquest. He held aloof from the war between the British and the Sikhs, only appearing as mediator after the battle of Sobraon.

(1846) when the British made over to him for Rs 75 lakhs the present territories of the State. He had to fight for the Valley and subsequently lost part of his State, Gilgit, over which the successors had at a heavy cost to reassert their claims. His son Ranbir Singh, a model Hindu, ruled from 1857 to 1885 when he was succeeded by his eldest son Major-General H H Maharaja Sir Partab Singh GCSI, GCIE.

**ADMINISTRATION**—For some years the Maharaja took no part in the administration of the State, but since 1905 he has exercised full powers, assisted by a Chief Minister—Rai Sahab Diwan Amar Nath, CIE—a Home Minister, and a Revenue Minister. The four chief executive officers are the Governors of Jammu and of Kashmir, the Wazir Wazarat of Gilgit and the Wazir Wazarat of Ladakh. The real administrative power lies with the petty subordinate officers (tahsildars) who exercise revenue, civil, and criminal jurisdiction with regular stages of appeal, but distance and the absence of easy communications are practical checks on the use or abuse of appeals. The British Resident has his headquarters at Srinagar, there is also a Political Agent at Gilgit responsible to the Government of India for the administration of the outlying petty States, and a British Officer is stationed at Leeb to assist in the supervision of Central Asian trade. In the Dogras the State has splendid materials for an Army, which consists of 6,961 troops, of whom 3,370 are maintained as Imperial Service troops.

**FINANCE**—The financial position of the State is strong and it has more than 46 lakhs invested in Government of India securities. The total revenue last year was 98 lakhs, the chief items being land revenue, forests, customs and octroi.

**PRODUCTION AND INDUSTRY**—The population is pre-eminently agricultural and pastoral. The system of land tenure has been described as "rotwari in ruins" great complexity existing owing to the fact that there is no local law of rent and revenue. The principal food crop is rice, maize, cotton, saffron, tobacco, hops (autumn crops) and wheat, barley, poppy, beans (spring crops) are also grown. Sheep are largely kept. The State forests are extensive and valuable. Exploration for minerals has not been attempted on sound principles. Vast fields of friable, dusty coal have been found. Gold has been found at Gulmarg and Sapphires in Padar. The industries of manufacture are

chiefly connected with sericulture (the silk filature at Srinagar, the largest in the world, was destroyed by fire in July 1912), oil-pressing and the manufacture of wine. The woollen cloth, shawls, and wood carving of the State are famous.

**COMMUNICATIONS**—The State contains only 16 miles of railway on the Tawi-Suchetgarh branch of the N-W Railway. The Jhelum is the only navigable river. At present there is much activity in improving road communications, but in many parts of the country wheeled traffic is unknown.

**PUBLIC WORKS**—In 1904 a flood spill channel above Srinagar was constructed with a view to minimizing the constant risk of floods, and it was hoped that the danger would be still further reduced by the carrying out of a scheme for lowering a part of the bed of the Jhelum, which has since been taken in hand. Good progress has been made with irrigation, but the most important schemes of recent years have been those for an electrical power station on the Jhelum River, and for a Railway into Kashmir. It was proposed to supply from this power station electrical energy for various State schemes (including the Jhelum dredging scheme) and for private enterprise and possibly for working the proposed Kashmir Railway. The works were completed about 1907, and the scheme according to the latest reports is working very satisfactorily. The proposal for a railway to Kashmir had been under discussion for many years, the nature of the country making the question of route a difficult one. In 1905, a decision was taken in favour of a line from Srinagar via the Jhelum Valley and Abbottabad, but the project has remained in abeyance pending the consideration of further schemes among which are proposals for lines of ropeway from Jammu to Srinagar and from Srinagar to the western borders via the Jhelum Valley.

**EDUCATION**—In educational matters Kashmir is the most backward tract in the whole of India. In the State as a whole only 2 in every 100 persons can read and write. The number of educational institutions has increased from 45 in 1891 to 379 in 1911.

**Resident**—The Hon. Mr S M Fraser, CSI, CIE.

**Political Agent**, at Gilgit—Major A D Macpherson.

## BALUCHISTAN AGENCY.

In this Agency are included the Native States of Kalat, Kharan and Las Bela. The Khan of Kalat is head of the Baluchistan tribal chiefs whose territories are comprised under the following divisions—Jhalwan, Sarawan, Makran, Kachhi, Domki-Kaheri-Umrani and Nasirabad. These districts form what may be termed Kalati Baluchistan, and occupy an area of 71,598 square miles. The inhabitants of the country are either Brahuys or Baluchis, both being Mahomedans of the Sunni sect. The country is sparsely populated, the total number being about 470,536. It derives its chief importance from its position with regard to Afghanistan on the north-western frontier of British India. The relations of Kalat with the British Government are governed by two treaties of 1854 and 1876, by the latter of which the

Khan agreed to act in subordinate co-operation with the British Government. There are, however, agreements with Kalat in connection with the construction of the Indo-European telegraph, the cession of jurisdiction on the railways and in the Bolan Pass, and the permanent lease of Quetta, Nushki and Nasirabad. The Khan is assisted in the administration of the State by a Political Adviser lent by the British Government. The Governor-General's Agent in Baluchistan conducts the relations between the Government of India and the Khan, and exercises his general political supervision over the district. The revenue of the State is about Rs 7,65,000. The present Khan is His Highness Amir Sir Mahumud Khan of Kalat, GCSI, CIE. He was born in 1864.

Kharan extends in a westerly and south-

westerly direction from near Nushki and Kalat to the Persian border. Its area is 14,210 square miles, it has a population of 19,610 and an annual average revenue of about Rs 90,000.

The Chief of Kharan, Sardar Sir Nauroz Khan, K.C.I.E., died in June 1909, and was succeeded by his son, Sardar Yakub Khan. The attitude of the new chief towards Government, and his administration generally were unsatisfactory. In 1911, he was murdered by the sepoy of his guard. Some trouble was caused by an uncle of the murdered chief, who declared himself Chief, but the Government of India finally recognised the succession of a son, Mir Habibulla Khan, and approved measures for the administration of the State during his minority.

Las Bela is a small State occupying the valley and delta of the Purah river, about 50 miles west

of the Sind boundary. Area 6,111 square miles, population 50,100, chiefly Sunni Mahomedans, estimated revenue about Rs 2,25,000. The Chief of Las Bela, known as the Jam, is bound by agreement with the British Government to conduct the administration of his State in accordance with the advice of the Governor-General's Agent. This control is exercised through the Political Agent in Kalat. Sentences of death must be referred for confirmation. The Jam also employs an approved Wazir, to whose advice he is subject and who generally assists him in the transaction of State business.

Agent to the Governor-General for Baluchistan—Lieut.-Col Sir John Ram-ay, K.C.I.E., C.S.I.

Political Agent, Kalat and Bolan Pass—Lieut.-Colonel A. B. Dew.

### RAJPUTANA AGENCY.

Rajputana is the name of a great territorial circle with a total area of about 130,462 square miles, which includes 18 Native States, two chiefships, and the small British province of Ajmer-Merwara. It is bounded on the west by Sind, on the north-west by the Punjab State of Bahawalpur, on the north and north-east by the Punjab, on the east by the United Provinces and Gwalior, while the southern boundary runs across the central region of India in an irregular zig-zag line. Of the Native States 17 are Rajput, 2 (Bharatpur and Dholpur) are Jat, and one (Tonk) is Mahomedan. The chief administrative control of the British district is vested *ex-officio* in the political officer, who holds the post of Governor-General's Agent for the supervision of the relations between the several Native States of Rajputana and the Government of India. For administrative purposes they are divided into the following groups—Alwar Agency, Bikaner Agency, Eastern Rajputana Agency, 3 States (Bharatpur, Dholpur, Karauli), Haroti and Tonk Agency, 3 States (principal States Bundi and Tonk), Jaipur Residency, 3 States (principal State, Jaipur), Kotah and Jhalawar Agency, 2 States, Mewar Residency, Southern Rajputana States Agency, 4 States (principal State, Banswara), Western Rajputana States Agency, 3 States (principal States, Marwar and Sirohi).

The Aravalli Hills intersect the country almost from end to end. The tract to the north-west of the hills is, as a whole, sandy, ill-watered and unproductive, but improves gradually from being a mere desert in the far west to comparatively fertile lands to the north-east. To the south-east on the Aravalli Hills lie higher and more fertile regions which contain extensive hill ranges and which are traversed by considerable rivers.

**COMMUNICATIONS**—The total length of railways in Rajputana is 1,576 miles, of which 739 are the property of the British Government. The Rajputana-Malwa (Government) runs from Ahmedabad to Bandikui and from there branches to Agra and Delhi. Of the Native State railways the most important is the Jodhpur-Bikaner line from Marwar Junction to Hyderabad (Sind) and to Bikaner.

**INHABITANTS**—Over 50 per cent of the population are engaged in some form of agriculture, about 20 per cent of the total population are

maintained by the preparation and supply of material substances, personal and domestic service provides employment for about 5 per cent and commerce for 2½ per cent of the population. The principal language is Rajasthani. Among castes and tribes, the most numerous are the Brahmans, Jats, Mahajans, Chamars, Rajputs, Minas, Gujars, Bhils, Malis, and Balais. The Rajputs are, of course, the aristocracy of the country, and as such hold the land to a very large extent, either as receivers of rent or as cultivators. By reason of their position as integral families of pure descent, as a landed nobility, and as the kinsmen of ruling chiefs, they are also the aristocracy of India, and their social prestige may be measured by observing that there is hardly a tribe or clan (as distinguished from a caste) in India which does not claim descent from, or irregular connection with, one of these Rajput stocks.

The population and area of the States are as follows—

Name of State	Area in square miles	Population in 1911
<i>Mewar Residency</i> —		
Udaipur	12,953	1,293,776
Banswara	1,946	165,463
Dungarpur	1,447	159,192
Partabgarh	686	62,704
<i>Western States Residency</i> —		
Jodhpur	34,963	2,057,553
Jaisalmer	16,062	88,311
Sirohi	1,964	189,127
<i>Jaipur Residency</i> —		
Jaipur	15,579	2,636,674
Kishangarh	858	87,191
Lawa	19	2,564
<i>Haroti-Tonk Agency</i> —		
Bundi	2,220	218,730
Tonk	1,114	303,181
Shahpura	405	47,397
<i>Eastern States Agency</i> —		
Bharatpur	1,982	626,665
Dholpur	1,155	270,973
Karauli	1,242	156,786
<i>Kotah-Jhalawar Agency</i> —		
Kotah	5,684	639,089
Jhalawar	810	96,271
Bikaner	23,311	700,983
Alwar	3,141	791,688





but this was disallowed and British protection was granted in 1853. The present ruler is His Highness Maharajah Dhiraj Maharao Sir Kesri Singh Bahadur, G.C.I.E., K.C.I.E. The State is ruled by the Maharao with the assistance of a Diwan and other officials. Revenue about 7 lakhs. Expenditure 6 lakhs.

**Jaipur State** is the fourth largest in Rajputana. It consists, for the most part, of level and open country. The Maharaja of Jaipur is the head of the Kachwaha clan of Rajputs, which claims descent from Kusa, the son of Rama, king of Ajodhya, and the hero of the famous epic poem the Ramayana. The dynasty in Eastern Rajputana dates from about the middle of the twelfth century, when Amber was made the capital of a small State. The Chiefs of that State acquired fame as generals under the Mughals in later centuries, one of the best known being Sawai Jai Singh in the eighteenth century who was remarkable for his scientific knowledge and skill. It was he who moved the capital from Amber and built the present city of Jaipur and elevated the State above the principalities around. On his death a part of the State was annexed by the Jats of Bharatpur and internal disputes brought Jaipur to great confusion. British protection was extended to Jaipur in 1818, but the State continued to be disturbed and a Council of Regency was appointed, which governed up to 1851, when Maharaja Ram Singh assumed full powers. He nominated as his successor Kaim Singh who succeeded in 1880, under the name of Sawai Madho Singh II, and is the present ruler. He was born in 1861, and, in consideration of his youth, the administration was at first conducted by a Council under the joint presidency of the Maharaja and the Political Agent. He was invested with full powers in 1882. In 1887, his salute was raised from 17 to 19 guns as a personal distinction, followed in 1896 by two additional guns. In 1888 he was created a G.C.S.I. In 1901 a G.C.I.E., and in 1903 a G.O.V.O. In 1904 he was made honorary colonel of the 13th Rajputs, and in 1911 a Major General. In 1908 he was presented with the Honorary degree of LL.D. of Edinburgh University and in 1912, made a Donat of the Order of the Hospital of St. John of Jerusalem. Among important events of His Highness's rule may be mentioned the raising of the Imperial Service Transport Corps in 1889-90, the construction of numerous irrigation works, hospitals and dispensaries, and the gift of 20 lakhs as an endowment to the Indian People's Famine Relief Trust. Jaipur City is the largest town in Rajputana and is one of the few eastern cities laid out on a regular plan. It contains, in addition to the Maharaja's Palace, many fine buildings. The administration of the State is carried on by the Maharaja assisted by a Council of ten members. The military force consists of an Imperial Service Transport Corps which has twice served in Frontier campaigns and about 5,000 infantry, 700 cavalry and 860 artillerymen. The normal revenue is about 65 lakhs, expenditure about 59 lakhs.

**Kishangarh State** is in the centre of Rajputana and consists practically of two narrow strips of land separated from each other, the northern mostly sandy, the southern generally flat and fertile. The Chiefs of Kishangarh

belong to the Rathor clan of Rajputs and are descended from Raja Udai Singh of Jodhpur, whose second son founded the town of Kishangarh in 1611. The State was brought under British protection in 1818. After various disputes necessitating British mediation, the State entered into good hands and was well ruled during the latter part of the nineteenth century. The present ruler is Major His Highness Maharajah Sir Madan Singh Bahadur, K.C.S.I., K.C.I.E., Umdal Rajhai-Buland Makan, who was born in 1884 and was invested with powers in 1905. He administers the State with the help of a Council of three members. Revenue 5.7 lakhs. Expenditure 4.6 lakhs.

**Lawa State, or Takurat, of Rajputana** is a separate chieftship under the protection of the British Government and independent of any Native States. It formerly belonged to Jaipur and then became part of the State of Tonk. In 1867, the Nawab of Tonk murdered the Thakur's uncle and his followers, and Lawa was then raised to its present State. The Thakurs of Lawa belonged to the Naruka sept of the Kachwaha Rajputs. The present Thakur, Mangal Singh, was born in 1873, and succeeded to the estate in May, 1892. Revenue about Rs. 11,000.

**Bundi State** is a mountainous territory in the south-east of Rajputana. The Chief of Bundi is the head of the Hara sept of the great clan of Chauhan Rajputs and the country occupied by this sept has for the last five or six centuries been known as Harauti. The State was founded in the early part of the fourteenth century and constant feuds with Mewar and Malwa followed. It threw in its lot with the Mahomedan emperors in the sixteenth century. In later times it was constantly ravaged by the Marathas and Pindaries and came under British protection in 1818 at which time it was paying tribute to Holkar. The present ruler of this State—which is administered by the Maharao Raja and a Council of 5 in an old-fashioned but popular manner—is His Highness Maharao Raja Sir Raghubir Singh Bahadur, G.C.I.E., G.O.V.O., K.C.S.I. He was born in 1869 and succeeded in 1899. Revenue about 10 lakhs. Expenditure 9.6 lakhs.

**Tonk State**—Partly in Rajputana and partly in Central India, consists of six districts separated from each other. The ruling family belongs to the Pathans of Afghans of the Buner tribe. The founder of the dynasty was Amir Khan, a General in the army of Holkar at the end of the eighteenth century. He received a conditional guarantee of the lands he held under the Afghans from Holkar in 1817. His son was deposed in 1867 owing to misrule. The present ruler of the State is His Highness Nawab Sir Muhammad Ibrahim Ali Khan Bahadur, G.C.I.E. The administration is conducted by the Nawab and a Council of four members, but the Political Agent takes an active part in the guidance of the administration and the finances—owing to the indebtedness of the State. Revenue 11 lakhs. Expenditure 9 lakhs.

**Shahpura Chieftship** is a small pastoral State. The ruling family belongs to the Seesha clan of Rajputs. The Chieftship came into existence about 1629, being a grant from the Emperor Shah Jahan to one Sujan Singh. The present Chief is Sir Nahar Singh, K.C.I.E. who

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**Karauli State** is a hilly tract in Eastern Rajasthan, of which the ruler is the head of the Jadon clan of Rajputs who claim descent from Krishna and were at one time very powerful. On the decline of the Mughal power the State was subjugated by the Marathas, but by the treaty of 1817 it was taken under British protection. Its subsequent history is of interest chiefly for a famous adoption case, in 1852. The present ruler is H. H. Maharaja Sir Banwar Pal Deo, G. C. I. I., who was born in 1861, installed in 1880, and invested with powers in 1889. He is assisted by a council of five members. Revenue 5 lakhs. Expenditure 4 4 lakhs.

nired as the titular chief and another—Umeed Singh—as the guaranteed actual ruler) broke out again in the thirties when it was decided with the consent of the Chief of Kotah to dismember the State and create a new principality of Bhawalpur as a separate provision for the descendant of Zahur Singh. The present ruler is H. H. Maharaja Sir Umeed Singh Bahadur, C.S.I., C.I.E., who was born in 1873 and invested with full powers in 1906. In administration he is assisted by a Diwan. The most important event of his rule has been the restoration on the deposition of the late chief of the Bhawalpur State of 15 out of the 17 districts which had been ceded in 1818 to form that principality. Revenue 31 lakhs. Expenditure 26 lakhs.

**Jhalwari State** (for history see under Kotah) consists of two separate tracts in the south-east of Rajputana. The ruling family belongs to the Jhalu clan of Rajputs. The last ruler was deposed for misgovernment in 1898, part of the State was reassigned to Kotah, and Kunwar Bhawan Singh, son of Thalur Chhatrapati of Jhalpur, was selected by Government to be the Chief of the new State. He was born in 1871 and was created a K.C.S.I. in 1908. He is assisted in administration by a Council and has done much to extend education in the State. Revenue 1 lakhs.

Bikaner State, the second largest in Rajputana, consists largely of sandy and ill watered land. It was founded by Bikaner, a Rathor Rajput, the sixth son of a Chief of Marwar, in the 15th century. Rajsingh, the first Raja, was one of Akbar's most distinguished generals, and built the main fort of Bikaner. Throughout the 18th century there was constant fighting between Bikaner and Jodhpur. In 1818 the Maharaja invited the aid of British troops to quell a rebellion and subsequently a special force had to be raised to deal with the dacoits on the southern border of the State. The Indians of the State continued to give trouble up to the death of the present chief, Colonel H. H. Maheswarji, who died in 1908. He died in England, where he was the King, who was born in 1850 and has full powers in 1908. He did not see any service in the Indian Army, but he was in the Camel Corps which served in the former land, and his H. H. was in the former campaign, his H. H. being mentioned in despatches. In 1900 he was awarded the first class Kalai Hind medal for the service he took in relieving the great famine of 1900. He is an honorary J. J. of the Indian Administration. In 1900 he was in the secretariat. His H. H. is a member of the certain rank to each of whom are a council of five department, and there is a judicial body, members which is particularly of importance but is consulted in matters of law and the normal revenue is Rs. 20 lakhs and the expenditure is 21 lakhs. There are no debts. A coal mine is worked at Palana, 14 miles south of the capital. The total area of land in the

A coal mine is worked at the mouth of the capital.

Alwar State is a hill tract of land in the north of Rajasthan. Its chief Rajputs, an Lakshmi branch of the Rathors, of whom the Maharaja of Jaipur is the head. The State was founded by Pratap Singh, who before his death in 1701 had secured the succession of large portions of the Jaipur

sent a force to co-operate with Lord Lake in the war of 1803 and an alliance was concluded with him in that year, when the boundaries of the State as now recognised were fixed. Various rebellions and disputes about succession mark the history of the State during the earlier part of the nineteenth century. The present chief, H. H. Lt-Col Sewai Maharaja Sir Jey Singhji Bahadur, K.C.S.I., K.C.I.E., who was born in 1882, succeeded his father in 1892 and was invested with powers in 1903. He carries on the administration with the assistance of a Council of four Ministers, Members of His Highness, Council and various heads of departments. The normal revenue and expenditure are about Rs 32 lakhs a year. The State maintains an Imperial service regiment of cavalry, another of infantry, and an irregular force. The late Maharaja was the first chief in Rajputana to offer (in 1888) aid in the defence of the Empire.

The capital is Alwar on the Rajputana-Mulwa Railway, 98 miles south-west of Delhi.

#### RAJPUTANA

Agent to Government—General—Sir E. G. Colvin

#### MEWAR

Resident—Lieut-Col J. L. Kaye

#### JAIPUR

Resident—Vacant

#### EASTERN RAJPUTANA STATES

Political Agent—Lieut-Col A. D. A. G. Binnerman

#### WESTERN RAJPUTANA STATES

Resident—Lieut-Col C. J. Windham

#### MARAWATI AND TONK

Political Agent—Lieut H. B. Peacock

#### KOTAH AND JHALWAR

Political Agent—Lieut-Col H. B. Peacock

### CENTRAL INDIA AGENCY.

Central India is the name given to the country occupied by the Native States grouped together under the supervision of the Political Officer in charge of the Central India Agency. These States lie between 21° 24' and 26° 32' N lat. and between 74° 0' and 83° 0' E long. The British districts of Jhansi and Lalitpur divide the agency into two main divisions—Bundelkhand and Baghelkhand lying to the east, and Central India proper to the west. The total area covered is 78,772 square miles, and the population (1911) amounts to 93,980. The great majority of the people are Hindus. The principal States are eight in number—Gwalior, Indore, Bhopal, Rewa, Dhar, Jaora, Datia and Orchha, of which two, Bhopal and Jaora, are Mahomedan and the rest are Hindu. Besides these there are a multitude of petty States held by their rulers under the immediate guarantee of the British Government, but having feudal relations with one or other of the larger States. The total number of States amounts to 153. For administrative purposes they are divided into the following groups: Baghelkhand Agency, 12 States (principal State Rewa); Bhopal Agency, 19 States (principal Bhopal); State Bhopawar Agency, 21 States (principal State Dhar); Bundelkhand Agency, 22 States (principal States, Datia and Orchha); Gwalior Agency, 32 States (principal State, Gwalior); Indore Residency, 9 States (principal State, Indore); Malwa Agency, 38 States (principal State, Jaora). The Agency may be divided into three natural divisions, the plateau, lowlying, and hilly. The plateau tract includes the Malwa plateau, the Highland tract stretching from the great wall of the Vindhya to Marwar, the land of open rolling plains. The lowlying tract embraces Northern Gwalior and stretches across into Bundelkhand and Baghelkhand up to the Kaimur Range. The hilly tract lies along the ranges of the Vindhya and the Satpura. There agriculture is little practised, the inhabitants being mostly members of the wild tribes. The territories of the different States are much intermingled, and their political relations with the Government of India and each other are very varied. Eleven Chiefs have direct treaty engagements with the British Government.

The following list gives the approximate size population and revenue of the eight principal States above mentioned—

Name	Area in square miles	Population	Revenue
Gwalior	25,133	3,102,270	Rs lakhs 140
Indore	9,506	1,007,856	70
Bhopal	6,902	730,383	30
Rewah	13,000	1,514,843	53
Dhar	1,783	154,070	9
Jaora	568	75,951	8
Datia	911	151,603	9
Orcha	2,079	330,032	11

**Gwalior**—The house of Sindhia traces its descent to a family of which one branch held the hereditary post of patel in a village near Sitara. The head of the family received a patent of rank from Aurangzebe. The founder of the Gwalior House was Ranoji Sindhia who is said to have been a personal attendant on the Peshwa Baji Rao. In 1726 together with Malhar Rao Holkar, the founder of the house of Indore, he was authorised by the Peshwa to collect revenues and he fixed his headquarters at the ancient city of Ujjain, which became the capital of the Sindhia dominions. Gwalior subsequently played a leading part in shaping the history of India. The reverses which Sindhia's troops met with at the hands of the British in 1778 and 1760 led to the treaty of Salbai (1782), which made the British arbiters in India and recognised Sindhia as an independent Chief and not as a vassal under the Peshwa. Subsequently Sindhia's military power, developed by the French Commander DeBoigny, was completely destroyed by the British victories of Ahmednagar, Assaye, Asarganj and Laswari.

The present ruler is Major-General H. H. Mahadho Rao Sindhia G.O.V., G.O.S.I., A.D.C. to the King. He succeeded in 1886 and obtained powers in 1894. In 1901 he went to China during the war, he holds the rank of honorary Major-General of the British Army and the honorary degree of LL.D., Cambridge. The

administration is controlled by the Maharaja assisted by five members of the Mughal khans.

The northern part of the State is traversed by the G. I. P. Railway and two branches run from Bhopal to Ujjain and from Bhopal to Baran. The Gwalior Light Railway runs for 250 miles from Gwalior to Bindal from Gwalior to Shopoor and from Gwalior to Sijoi. The main industries are cotton spinning which is done all over the State, the mulberry and at Chanderi leather work etc. The State maintains three regiments of Imperial Service Cavalry, two battalions of Imperial Service Infantry and a transport corps. Laheer the capital city is two miles to the south of the present city and the fort of Gwalior. Annual expenditure 1,50 lakhs.

**Indore**—The Holkars of Indore belong to the shepherd class the founder of the house, Malhar Rao Holkar being born in 1699. His soldierly qualities brought him to the front under the Peshwa who took him into his service and employed him in his conquests. When the Maratha power was broken at the battle of Panipat, in 1761 Malhar Rao had acquired vast territories stretching from the Deccan to the Ganges. He was succeeded by a lunatic son who again was succeeded by his mother, Ahilya Bai whose administration is still looked upon as that of a model ruler. Disputes as to the succession and other causes weakened this powerful State, and, when it assumed a hostile attitude on the outbreak of war in 1817 between the British and the Peshwa, Holkar was compelled to come to terms. The Treaty of Mandasore in 1818 still governs the regulations existing between the State and the British Government. In the mutiny of 1857 when Holkar was unable to control his troops he personally gave every possible assistance to the authorities at Mhow.

In 1903 Sivaji Rao abdicated in favour of his son, His Highness Maharaja Tukoji Rao Holkar, the present ruler, who was born in 1890, and was formally invested with ruling powers in November 1911. In the administration His Highness is assisted by his Chief Minister and a Council of 5 Ministers. The State Army consists of 519 Imperial Service Troops and 1,629 State forces. The capital is Indore City on the Ajmer-Khandwa Section of the Rajputana-Malwa Railway. The ordinary revenue for 1914-15 is estimated at Rs. 85,49,400 and the ordinary expenditure estimated for that year is about the same amount.

**Bhopal**—Bhopal State was founded by Dost Muhammad Khan an Afghan from Tirah, who went to Delhi in 1708 in search of employment. Obtaining a lease of the Berasia Perganas he extended his dominions, assumed independence, and adopted the title of Nawab. Of subsequent rulers the most noticeable is Vatulla a lady of remarkable power, who controlled the State for 50 years. In the early part of the nineteenth century the State successfully withstood the combined attacks of Gwalior and Nagpur, and, by the agreement of 1817, Bhopal undertook to assist the British with a contingent force and to co-operate against the Pindari bands.

The present Begum is Her Highness Nawab Sultan Jahan, G.C.S.I., G.C.I.E., C.I.O., who succeeded in 1901 and personally conducts the administration of her State assisted by her eldest son, Nawab Mohamed Nasrulla Khan.

The State Army consists of 2,219 men, including a regiment of Imperial Service Cavalry commanded by a son of the present ruler. The capital is Bhopal City, at the Junction of the Midland Section of the G. I. P. Railway and the Bhopal-Ujjain Railway.

**Rewah**—This State lies in the Baghelkhand Agency, and falls into two natural divisions separated by the scarp of the Kaimur range. Its Chiefs are Baghel Rajputs descended from the Solanki clan which ruled over Gujrat from the tenth to the thirteenth century. In 1812 a body of Pindaries raided Mirzapur from Rewah territory and the chief, who had previously rejected overtures for an alliance, was called upon to accede to a treaty acknowledging the protection of the British Government. During the Mutiny, Rewah offered troops to the British, and for his services then, various parganas, which had been seized by the Marathas, were restored to the Rewah Chief. The present chief is H. H. Maharaja Sir Venkat Raman Singh, G.C.S.I., who was born in 1876. He is assisted in the administration by two Commissioners, one for revenue matters and one for judicial. The State force consist of about 1,700 men. The State is famous for its archaeological remains and is rich in minerals, coal being mined at Umaria. The average expenditure is Rs. 11 lakhs.

**Dhar**—This State, under the Bhopawar Agency takes its name from the old city of Dhar long famous as the capital of the Paramara Rajputs, who ruled over Malwa from ninth to the thirteenth century and from whom the present chiefs of Dhar—Ponwar Marathas—claim descent. In the middle of the 18th century the Chief of Dhar, Anand Rao, was one of the leading chiefs of Central India, sharing with Holkar and Sindhia the rule of Malwa. But in 1819, when a treaty was made with the British, the State had become so reduced that it consisted of little more than the capital. The ruler is H. H. Raja Sir Udaji Rao Ponwar, K.C.S.I. who was born in 1886, and has control of all civil, judicial, and ordinary administrative matters. There are 22 feudatories, of whom 13 hold under a guarantee from the British Government. The average expenditure is about 8 lakhs.

**Jaora State**—This State is in the Malwa Agency and has its head quarters at Jaora town. The first Nawab was an Afghan from Swat, who had come to India to make his fortune, found employment under the freebooter Amir Khan, and obtained the State after the treaty of Mandasore in 1817. The present chief is Major H. H. Sir Mahomed Irtikhar Ali Khan, K.C.I.E., who was born in 1883 and is an honorary major in the Indian Army. The soil of the State is among the richest in Malwa being mainly of the best black cotton variety, bearing excellent crops of poppy. The average annual revenue is Rs. 7,72,000.

**Rutlam State**—In the Malwa Agency, has an area of 902 square miles. The Rajas are Rathor Rajputs or the Jodhpur house the present chief being H. H. Raja Sajjan Singh, who succeeded in 1893. Revenue about five lakhs.

**Datia State**—The chiefs of this State, in the Bundelkhand Agency, are Bundela Rajputs of the Orchha house. The territory was granted by the chief of Orchha to his son Bhagwan Rao in 1626, and this was extended by conquest and

by grants from the Delhi emperors. The present chief is H. H. Maharaja Lokendra Gobind Singh Bahadur, who was born in 1886 and succeeded in 1907.

**Orchha State**—The chiefs of this State are Bundela Rajputs claiming to be descendants of the Gajwarwars of Benares. It was founded as an independent State in 1048 A. D. It entered into relations with the British by the treaty made in 1812. The present ruler is His Highness Sir Pratap Singh, G. C. S. I., G. C. I. E., who was born in 1854. He has the title of Saramad-i-Rajaha-i-Bundelkhand Maharaja Mahendra Sawai Bahadur. The State has a population of 330,032 and an area of 2080 square miles. The capital is Tikamgarh, 36 miles from Lalitpur on the G. I. P. Railway. Orchha, the old capital, has fallen into decay but is a place of interest on account of its magnificent buildings of which the finest were erected by Bir Singh Deo, the most famous ruler of the State (1605-1627).

*Agent to Governor-General*—O. V. Bosanquet

JNDORE

*Resident*—C. L. S. Russell

BHOPAL

*Political Agent*—W. S. Davis

BUNDELKHAND

*Political Agent*—Lieut.-Col. P. T. A. Spence

BAGHELKHAND

*Political Agent*—Lieut.-Col. S. H. Godfrey

BHOPAWAR

*Political Agent*—L. M. Crump

## Sikkim.

Sikkim is bounded on the north and north-east by Tibet, on the south-east by Bhutan, on the south by the British district of Darjiling, and on the west by Nepal. The population consists of Bhutias, Lepchas, and Nepalese. It forms the direct route to the Chumbi Valley in Tibet. The main axis of the Himalayas, which runs east and west, forms the boundary between Sikkim and Tibet. The Singalila and Chola ranges, which run southwards from the main chain, separate Sikkim from Nepal on the west, and from Tibet and Bhutan on the east. From the eastern flank of the Singalila range rise the great snow peaks of Kinchinjunga (28,146 feet), one of the highest mountains in the world, it throws out a second spur terminating at Tendong. The Chola range which is much loftier than that of Singalila, leaves the main chain at the Dongkya mountain.

Tradition says that the ancestors of the rajas of Sikkim originally came from eastern Tibet. The State was twice invaded by the Gurkhas at the end of the eighteenth century. On the outbreak of the Nepal War in 1814, the British formed an alliance with the Raja of Sikkim and at the close of the war the Raja was rewarded by a considerable accession of territory. In 1835 the Raja granted the site of Darjiling to the British and received Rs. 3,000 annually in lieu of it. This grant was stopped and a part of the State was annexed for the seizure and detention of Dr. Campbell, the Superintendent of Darjiling, and Dr. Hooker, the famous naturalist, in 1849. The State was previously under the Government of Bengal, but was brought under the direct supervision of the Government of India in 1906.

The State is thinly populated, the area being 2,818 square miles, and the population 87,920, chiefly Buddhists and Hindus. The most important crop is maize. There are several trade routes through Sikkim from Darjiling District into Tibet. In the convention of 1890 provision was made for the opening of a trade route, but the results were disappointing, and the failure of the Tibetans to fulfil their obligations resulted in 1901 in the despatch of a mission to Lhasa, where a new convention was signed. Trade with the British has increased in recent years, and in 1911-12 reached total value of 24 lakhs. A number of good roads have been constructed in recent years. The present ruler is His Highness Maharajah Tashi Namgyal, who was born in 1893 and succeeded in 1914. The Political Officer stationed at Gangtok advises and assists the Maharajah and his Council. The average revenue is Rs. 2,85,000.

*Political Officer in Sikkim*—C. A. Bell, G. C. M. G.

## Bhutan

Bhutan extends for a distance of approximately 190 miles east and west along the southern slopes of the central axis of the Himalayas, adjacent to the northern border of Eastern Bengal and Assam. Its area is 18,000 square miles and its population, consisting of Buddhists and Hindus, has been estimated at 300,000. The country formerly belonged to a tribe called Tekpa, but was wrested from them by some Tibetan soldiers about the middle of the seventeenth century. British relations with Bhutan commenced in 1772 when the Bhotias invaded the principality of Cooch Behar and British aid was invoked by that State. After a number of raids by the Bhutanese into Assam, an envoy (the Hon. A. Eden) was sent to Bhutan, who was grossly insulted and compelled to sign a treaty surrendering the Duars to Bhutan. On his return the treaty was disallowed and the Duars annexed. This was followed by the treaty of 1865, by which the State's relations with the Government of India were satisfactorily regulated. The State formerly received an allowance of half a lakh a year from the British Government in consideration of the cession in 1865 of some areas on the southern borders. This allowance was doubled by a new treaty concluded in January 1910, by which the Bhutanese Government bound itself to be guided by the advice of the British Government in regard to its external relations, while the British Government undertook to exercise no interference in the internal administration of Bhutan. On the occasion of the Tibet Mission of 1904, the Bhotias gave strong proof of their friendly attitude. Not only did they consent to the survey of a road through their country to Chumbi, but their ruler, the Tongsa Penlop, accompanied the British troops to Lhasa, and assisted in the negotiations with the Tibetan authorities. For these services he was made a G. C. I. E., and he has since entertained the British Agent hospitably at his capital. The ruler is now known as H. H. the Maharaja of Bhutan, Sir Ugyen Wangchuk, G. C. S. I., G. C. I. E. At the head of the Bhutan Government, there are nominally two supreme authorities, the Dharma Raja, known as Shapting Renipoche, the spiritual head, and the Deb or Depa Raja, the temporal ruler. The Dharma Raja is

regarded as a very high incarnation of Buddha, far higher than the ordinary incarnations in Tibet of which there are several hundreds. On the death of a Dharma Raja a year or two is allowed to elapse and his reincarnation then takes place, always in the Chofa, or royal family of Bhutan.

Cultivation is backward and the chief crop is maize. The Military force consists of local levies under the control of the different chiefs. They are of no military value.

### Nepal

The kingdom of Nepal is a narrow tract of country extending for about 520 miles along the southern slope of the central axis of the Himalayas. It has an area of about 54,000 square miles with a population of about 5,000,000, chiefly Hindus. The greater part of the country is mountainous, the lower slopes being cultivated. Above these is a rugged broken wall of rock leading up to the chain of snow-clad peaks which culminate in Mount Everest (29,002 feet) and others of slightly less altitude. The country before the Gurkha occupation was split up into several small kingdoms under Newar kings. The Gurkhas under Prithvi Narayan Shah overran and conquered the different kingdoms of Patan, Kathmandu, and Bhatnagar, and other places during the latter half of the 18th century and since then have been rulers of the whole of Nepal. In 1846 the head of the Rana family obtained from the sovereign the perpetual right to the office of Prime Minister of Nepal, and the right is still enjoyed by his descendant. In 1850 Jung Bahadur paid a visit to England and was thus the first Hindu Chief to leave India and to become acquainted with the power and resources of the British nation. The relations of Nepal with the Government of India are regulated by the treaty of 1816 and subsequent agreements, but the political status of Nepal is difficult to define. It may be said to stand intermediate between Afghanistan and the Native States of India. The point of resemblance to Afghanistan is in the complete freedom which Nepal enjoys in the management of its internal affairs, while in both countries foreign relations are controlled by the Indian Government. The analogy to the Native States is that, by treaty, Nepal is obliged to receive a British Resident at Katmandu and cannot take

Europeans into service without the sanction of the Indian Government. But, for the reasons above given, the functions of the Resident differ from those that are commonly exercised by Residents at Native Courts.

Nepal is also brought into relations with China, whose nominal suzerainty she acknowledged. It is an influence that weighs light, and consists in the de-pitch, every five years, of a mission with presents to the ruling Emperor. This mission, though it may at one time have carried a certain amount of political significance, has now mainly a trading aspect. Its expenses are paid by the Chinese from the time it crosses the Nepalese frontier, and a brisk trade is carried on throughout the journey.

From the foregoing account of the history of Nepal it will be seen that the Government of the country has generally been in the hands of the Minister of the day. Since the time of Jung Bahadur this system of government has been clearly laid down and defined. The sovereign, or Maharaja Dhuraj, as he is called, is but a dignified figure head, whose position can best be likened to that of the Emperor of Japan during the Shogunate. The real ruler of the country is the Minister who, while enjoying complete monopoly of power, couples with his official rank the exalted title of Maharaja. Next to him comes the Commander-in-Chief, who ordinarily succeeds to the office of Minister. The present Minister at the head of affairs of Nepal is Maharaja Sir Chandra Shum Shere Jung Bahadur Rana, G C B, G C S I, G C V O, D C L and Honorary Major General in the British Army. He has been Prime Minister and Marshal of Nepal since June, 1901.

Rice, wheat and maize form the chief crops in the lowlands. Mineral wealth is supposed to be great, but, like other sources of revenue, has not been developed. Communications in the State are primitive. The revenue is about two crores of rupees per annum. The standing army is estimated at 45,000, the high posts in it being filled by relations of the Minister. The State is of considerable archaeological interest and many of the sites connected with scenes of Buddha's life have been identified in it by the remains of inscribed pillars.

Resident Lieut.-Col J Manners Smith, V C G C V O, C I E

### NORTH-WEST FRONTIER STATES.

The Native states of the North-West Frontier Provinces are Amb, Chitral, Dir, Nawaga (Bajaur), and Phulera. The total area is about 7,704 square miles and the population, mainly Mahomedan, is 1,622,094. The average annual revenue of the first four is about Rs 4,65,000, that of Phulera is unknown.

**Amb**—Is only a village on the western bank of the Indus in Independent Tanawal.

**Chitral**—Runs from Dir to the south of the Hindu-Kush range in the north, and has an area of about 4,500 square miles. The ruling dynasty has maintained itself for more than three hundred years, during the greater part of which the State has constantly been at war with its neighbours. It was visited in 1885 by the Lockhart Mission, and in 1889, on the establishment of a political agency in Gilgit, the ruler

of Chitral received an annual subsidy from the British Government. That subsidy was increased two years later on condition that the ruler, Amam-ul-Mulk, accepted the advice of the British Government in all matters connected with foreign policy and frontier defence. His sudden death in 1892 was followed by a dispute as to the succession. The eldest son Nizam-ul-Mulk was recognised by Government, but he was murdered in 1895. A religious war was declared against the infidels and the Agent at Gilgit, who had been sent to Chitral to report on the situation, was besieged with his escort and a force had to be despatched (April 1895) to their relief.

The three valleys of which the State consists are extremely fertile and continuously cultivated. The internal administration of the

country is conducted by the Mehtar, and the foreign policy is regulated by the Political Agent

**Dir**—The territories of this State, about 5,000 square miles in area, include the country drained by the Panjkora and its affluents down to the junction of the former river with the Bajaur or Rud, and also the country east of this from a point a little above Tirah in Upper Swat down to the Dush Khel Country, following the right bank of the Swat river throughout. The Khan of Dir is the overlord of the country exacting allegiance from the petty chiefs of the clans. Dir is mainly held by Yusufzal Pathans, the old non-Pathan inhabitants being now confined to the upper portion of the Panjkora Valley known as the Bashkar.

**Bajaur**—Nawagai is a tract of country

included in the territories collectively known as Bajaur which is bounded on the north by the Panjkora river, on the east by the Utman Khel and Mohmand territories and on the west by the watershed of the Kuna river which divides it from Afghanistan. The political system, if it can be termed system, is a communal form of party government, subject to the control of the Khan of Nawagai, who is nominally the hereditary chief of all Bajaur. Under him the country is divided into several minor Khanates, each governed by a chieftain, usually a near relative of the Khan. But virtually the authority of the chieftains is limited to the rights to levy tithe, or *ushar* when they can enforce its payment, and to exact military service if the tribesmen choose to render it.

*Political Agent for Dir, Swat and Chitral*  
Major W J Keen

## NATIVE STATES UNDER LOCAL GOVERNMENTS.

The Madras Presidency includes 5 Native States covering an area of 10,087 square miles. Of these the States of Travancore and Cochin represent ancient Hindu dynasties. Pudukottai is the inheritance of the chieftain called the Tondiman. Banganapalle and Sandur, two petty States, of which the first is ruled by a Nawab, lie in the centre of two British districts.

Name	Area sq miles	Population	Approx Revenue in lakhs of rupee
Travancore	7,129	3,428,975	128
Cochin	1,361	918,110	47
Pudukottai	1,178	411,878	16
Banganapalle	255	39,356	2.8
Sandur	161	13,517	1.7 1.2

**Travancore**—This State occupies the south-west portion of the Indian Peninsula, forming an irregular triangle with its apex at Cape Comorin. The early history of Travancore is in great part traditional, but there is little doubt that H. H. the Maharaja is the representative of the Chera dynasty, one of the three great Hindu dynasties which exercised sovereignty at one time in Southern India. The petty chiefs, who had subsequently set up as independent rulers within the State, were all subdued, and the whole country, included within its present boundaries, was consolidated and brought under one rule, by the Maharaja Marthanda Varma (1729-58). The English first settled at Anjengo, a few miles to the north of Trivandrum, and built a factory there in 1684. In the wars in which the East India Company were engaged in Madura and Tinnevely, in the middle of the 18th century, the Travancore State gave assistance to the British authorities. Travancore was reckoned as one

of the staunchest allies of the British Power and was accordingly included in the Treaty made in 1784 between the East India Company and the Sultan of Mysore. To protect the State from possible inroads by Tippu, an arrangement was come to in 1788 with the East India Company, and in 1795 a formal treaty was concluded, by which the Company agreed to protect Travancore from all foreign enemies. In 1805 the annual subsidy to be paid by Travancore was fixed at 8 lakhs of rupees.

The present ruler is His Highness Maharaja Sri Rama Varma, GCSI, GCIE, who was born in 1857 and ascended the masnad in 1885. The government is conducted in his name with the assistance of a Dewan (M. Krishnan Nair). The work of legislation is entrusted to a Council brought into existence in 1888. An assembly known as the Sri Mulam Popular Assembly meets once a year, when its members are able to bring suggestions before the Dewan. The State supports a military force of 1,474 men. Education has advanced considerably in recent years and the State takes a leading place in that respect. The principal food grain grown is rice, but the main source of agricultural wealth is the coconut. Other crops are pepper, areca-nut, jack-fruit and tapioca. Cotton weaving and the making of matting from the coir are the chief industries. The State is well provided with roads, and with a natural system of back-waters, besides canals and rivers navigable for country crafts. Two lines of railways intersect the country, the Cochin-Shoranore in the north-west and the Tinnevely-Quilon passing through the heart of the State. A third line, from Quilon to Trivandrum, is in process of construction. The capital is Trivandrum.

*Political Agent, R. A. Graham*

**Cochin**—This State on the west coast of India is bounded by the Malabar District of the Madras Presidency and the State of Travancore. Very little is known of its early history. According to tradition, the Rajas of Cochin hold the territory in right of descent from Cheraman Perumal, who governed the whole country of Kerala, including Travancore and Malabar, as

Viceroy of the Chola Kings about the beginning of the ninth century, and afterwards established himself as an independent Ruler. In 1502, the Portuguese were allowed to settle in what is now British Cochin and in the following year they built a fort and established commercial relations in the State. In the earlier wars with the Zamorin of Calicut, they assisted the Rajas of Cochin. The influence of the Portuguese on the west coast began to decline about the latter part of the seventeenth century, and in 1663 they were ousted from the town of Cochin by the Dutch with whom the Raja entered into friendly relations. About a century later, in 1759, when the Dutch power began to decline, the Raja was attacked by the Zamorin of Calicut, who was expelled with the assistance of the Raja of Travancore. In 1776, the State was conquered by Hyder Ali, to whom it remained tributary and subordinate, and subsequently to his son, Tippu Sultan. A treaty was concluded in 1791 between the Raja and the East India Company, by which His Highness agreed to become tributary to the British Government for his territories which were then in the possession of Tippu, and to pay a subsidy.

His Highness Sir Sri Rama Varmah, GCSI, GCE, who was born in 1852, and who ascended the masnad in 1895, having abdicated in December, 1914. His Highness Sri Rama Varmah who was born on 6th October 1858 succeeded to the throne and was duly installed as Raja on the 21st January 1915. The administration is conducted under the control of the Raja whose chief Minister and Executive Officer is the Dewan (J. W. Bhore). The forests of Cochin form one of its most valuable assets. They abound in teak, ebony, blackwood, and other valuable trees. Rice forms the staple of cultivation. Coconuts are largely raised in the sandy tracts, and their products form the chief exports of the State. Communications by road and backwaters are good, and the State owns a line from Shornore to Ernakulam, the capital of the State and a Forest Steam Tramway used in developing the forests. The State supports a force of 274 men.

*Political Agent, A. T. Forbes.*

**Pudukottai**—This State is bounded on the north and west by Trichinopoly, on the south by Madura and on the east by Tanjore. In early times a part of the State belonged to the Chola Kings and the southern part to the Pandya Kings of Madura. Relations with the English began during the Carnatic wars. During the siege of Trichinopoly by the French in 1752, the Tondiman of the time did good service to the Company's cause by sending them provisions, although his own country was on at least one occasion ravaged as a consequence of his fidelity to the English. In 1760 he sent some of his troops to aid Mumtaz Ali, who had usurped the Company's revenue command, in settling the Madura and Tanjore countries. Subsequently he was of much service in the wars with Haidar Ali. His services were rewarded by a grant of territory subject to the conditions that the district should not be alienated (1806). Apart from that there is no

treaty or arrangement with the Raja. The present ruler is Sri Brihadamba Sir Marthanda Bhairava Tondiman Bahadur, GCE, who is eighth in descent from the founder of the family. He succeeded in 1886. The Collector of Trichinopoly is ex-officio Political Agent for Pudukottai. The administration of the State, under the Raja, is entrusted to a State Council of three members, a Superintendent (Mr. J. T. Gwynn, ICS), Dewan, and Councillor. The various departments are constituted on the British India model. The principal food crop is rice. The forests, which cover about one seventh of the State contain only small timber. There are no large industries. The State is well provided with roads, but Pudukottai is the only municipal town in the State.

*Political Agent, A. L. Vibert.*

**Banganapalle**—This is a small State in two detached portions which in the eighteenth century passed from Hyderabad to Mysore and back again to Hyderabad. The control over it was ceded to the Madras Government by the Nizam in 1800, and subsequently passed through a long period of mismanagement ending in the removal of the Nawab Fatch Ali Khan in 1905. The present ruler is Nawab Sa'id Gulam Ali Khan, a Mahomedan of the Shia Sect, who administers the State with the assistance of the Dewan, Khaja Akbar Husain. The chief food grains grown are rice, wheat and cholam. Roads have recently been constructed and the capital, Banganapalle, is being gradually opened up with broad thoroughfares. The Nawab pays no tribute and maintains no military force. Sericulture, the cultivation, and weaving industries have lately been started in the State by the Superintendent of Industries.

*Political Agent, H. A. B. Vernon, ICS.*

**Sandur**—This is a small State situated surrounded by the District of Bellary the Collector of which is the Political Agent. Its history dates from 1725 when it was founded by an ancestor of the present Raja, a Mahomedan named Siddhaji Rao. It subsequently became a vassal to the Peshwa after which it was given a formal title for the State as granted by the Madras Government to one Siva Rao. The present ruler is H. H. Raja Siva Rao, who was born in 1862. The State is administered by the Raja and the Dewan (Mr. P. A. Subbarao, M.A., ICS). The Raja pays no tribute and maintains no military force. The principal crops are rice, wheat, and cholam. There are no industries in the State. A small quantity of silk is raised.

The minerals of the State are of great interest. The bed of the river in the State probably the richest in the State. It is situated near the southern base of the Western Ghats, at a ridge 150 feet high, which has been the site of a quarry of pure iron ore for centuries. The ore is of a fine quality and is of the softest kind. It is found in the State in the form of a small quantity of iron ore. The iron ore is of a fine quality and is of the softest kind. It is found in the State in the form of a small quantity of iron ore.

*Political Agent, A. L. G. V. V.*



## UNDER THE GOVERNMENT OF BOMBAY.

More than a half of the total number of the very various units counted as Native States in India are under the Government of Bombay. The characteristic feature of the Bombay States is the great number of petty principalities, the peninsula of Kathiawar alone contains nearly two hundred separate States. The recognition of these innumerable jurisdictions is due to the circumstance that the early Bombay administrators were induced to treat the *de facto* exercise of civil and criminal jurisdiction by a landholder as carrying with it a quasi-sovereign status. As the rule of succession by primogeniture applies only to the larger principalities, the minor states are continually suffering disintegration. In Bombay, as in Central India, there are to be found everywhere the traces of disintegration and disorder left by the eighteenth century. In no part of India is there a greater variety of principalities. The bulk of them are of modern origin, the majority having been founded by Marathas in the general scramble for power in the middle of the eighteenth century, but several Rajput houses date from earlier times. Interesting traces of ancient history are to be found at Sachin, Janjira and Jafarabad, where chiefs of a foreign ancestry, descended from Abyssinian admirals of the Deccan fleets, still remain. A few aboriginal chiefs, Bhils or Kolis, exercise an enfeebled authority in the Dangs and the hilly country that fringes the Mahi and the Narbada rivers.

The control of the Bombay Government is exercised through Political Agents, whose positions and duties vary greatly. In some of the more important States their functions are confined to the giving of advice and the exercise of a general surveillance, in other cases they are invested with an actual share in the administration, while States whose rulers are minors—and the number of these is always large—are directly managed by Government officers. Some of the States are subordinate to other States, and not in direct relations with the British Government, in these cases the status of the feudatories is usually guaranteed by Government. The powers of the chiefs are regulated by treaty or custom, and range downwards to a mere right to collect revenue in a share of a village, without criminal or civil jurisdiction, as in the case of the petty chiefs of Kathiawar.

The native States in the Bombay Presidency number 377. Area 65,761 square miles. Population (1911) 7,411,875. They are divided for administrative purposes into the following agencies—Bijapur Agency, 2 states, Cutch Agency, 1 state, Dharwar Agency, 1 state (Savanur), Kaira Agency, 1 state (Cambay), Kathiawar Agency, 187 states (principal states, Bhavnagar, Dhrangadhra, Gondal, Junagadh, Nawanagar), West Khandesh Agency (20 states), Kolaba Agency, 1 state (Janjira), Kolhapur Agency, 9 states (principal state, Kolhapur, with 9 feudatory states), Mahi Kantha Agency, 51 states (principal state, Idar), Nasik Agency, 1 state ((Surgana), Palanpur Agency, 17 states (principal state, Palanpur), Poona Agency, 1 state (Bhor),

Rewa Kantha Agency, 62 states (principal state, Rajpipla), Satara Agency, 2 states, Savantvadi Agency, 1 state, Sholapur Agency, 1 state, Sukkur Agency, 1 state (Khairpur), Surat Agency, 17 states, Thana Agency, 1 state (Janhar). The table below gives details of the area, etc. of the more important States—

State	Area in sq miles	Popula- tion	Approx Revenue in lakhs of rupees
Bhavnagar	2,860	441,367	17
Cutch	7,016	513,429	25
Dhrangadhra	1,156	79,142	12
Gondal	1,024	161,916	15
Idar	1,609	202,811	6
Junagadh	3,284	434,222	26
Khairpur	6,050	223,788	15
Kolhapur	3,165	833,441	57
Nawanagar	3,791	349,400	22
Palanpur	1,750	228,250	5
Rajpipla	1,517	161,588	9

**Bijapur Agency**—This comprises the Satara jaghir of Jath and the small state of Daphlapur (total area 980 square miles), the latter (which has an area of 96 square miles) being an integral part of the State of Jath to which it will lapse on the demise of the present Rani, the widow of the late chief. On the annexation of Satara, in 1849, Jath and Daphlapur, like other Satara Jagirs, became feudatories of the British Government. The latter has more than once interfered to adjust the pecuniary affairs of the Jath Jagir, and in consequence of numerous acts of oppression on the part of the then ruler, was compelled to assume direct management from 1874 to 1885. The Chief of Jath, who belongs to the Maratha caste, is a Treaty Chief and ranks as a first class Sardar. He is styled Deshmukh. He holds a sanad of adoption, and the succession follows the rule of primogeniture. The small State of Daphlapur is managed by a Rani, aided by her *karbhari*. The gross revenue of the Agency is about 3 lakhs chiefly derived from land revenue. The Jath State pays to the British Government Rs. 6,400 per annum in lieu of a horse contingent and Rs. 4,310 on account of Sardeshmukhi rights.

*Political Agent, Jahangir Kalkhosru Navroji Kabraji, Collector of Bijapur*

**Cutch**—The State is bounded on the north and north-west by Sind, on the east by the Palanpur Agency, on the south by the Peninsula of Kathiawar and the Gulf of Cutch and the south-west by the Indian Ocean. Its area, exclusive of the great salt marsh called the Rann of Cutch, is 7,016 square miles. The capital is Bhuj, where the ruling Chief (the Rao) His Highness Maha Rao Sri Khenkarji Saval Baidur, G.O.I.E., resides. From its isolated position, the special character of its people, their peculiar dialect, and their strong feeling of personal loyalty to their ruler, the peninsula of Cutch has more of the elements of a distinct nationality than any other of the dependencies of Bombay. The earliest historic notices of the State occur in the Greek writers. Its modern

History date from its conquest by the Sind tribe of Samra Rajputs in the fourteenth century. The nation of the Samras forming the ruling family in Cutch were known as the Jadeja or children of Jada. The British made a treaty with the State in 1815 but three years after the conduct of the ruler made it necessary to occupy the capital and depose him. There is a fair proportion of good arable soil in Cutch, and wheat, barley and cotton are cultivated. Both iron and coal are found but are not worked. Cutch is noted for its beautiful embroidery and silverwork and its manufactures of silk and cotton are of some importance. Trade is chiefly carried by sea. The ruling chief is the supreme authority. A few of the Bhavads are invested with jurisdictional powers in varying degrees in their own States and over their own retainers. A notable fact in connection with the administration of the Cutch State is the number and position of the Bhavad. These are Rajput nobles forming the brotherhood of the Rao. They were granted a share in the territories of the ruling chief as provision for their maintenance and are bound to furnish troops on an emergency. The number of these chiefs is 157 and the total number of the Jadeja tribe in Cutch is about 16,000. The British military force having been withdrawn from Bhuj the State now pays Rs. 82,237 annually to the British Government. The military force consists of about 1,000 in addition to which there are some irregular infantry and the Bhavads could furnish on requisition a mixed force of four thousand.

*Political Agent, Major R. S. Pottinger*

**Dharwar Agency**—This comprises only the small State of Savanur. The founder of the reigning family who are Mahomedans of Pathan origin was a jagirdar of Emperor Aurangzeb. At the close of the last Maratha War the Nawab of Savanur whose conduct had been exceptionally loyal was confirmed in his possessions by the British Government. The State pays no tribute. The principal crop is cotton. The area is 70 square miles and population 17,900. The revenue is about one lakh. The present chief is Abdul Majid Khan Dilerjyng Bahadur.

*Political Agent, J. A. G. Wales, I. C. S.*

**Kaira Agency**—This includes only the State of Cambay at the head of the Gulf of the same name. Cambay was formerly one of the chief ports of India and of the Anhilwada Kingdom. At the end of the thirteenth century it is said to have been one of the richest towns in India, and at the beginning of the sixteenth century also it formed one of the chief centres of commerce in Western India. Factories were established there by the English and the Dutch. It was established a distinct State about 1730, the founder of the present family of Chiefs being the last but one of the Mahomedan Governors of Gujarat. The present Nawab is His Highness Mirza Hussein Yawir Khan who is a Shiah Mogul of the Najumi-ni family of Persia, and was born on the 10th May 1911. His father, the late Nawab Jufar Ali Khan, died on 21st January 1915, leaving him a minor. The State is then under British Administration. The State pays a tribute of Rs. 21,924 to the British Government. Wheat and cotton are the principal crops. There is a broad gauge line from Cambay to Patlad, connecting with

the B. B. & C. I. Railway at Anand. Cambay is a first class State having full jurisdiction. Revenue is about six lakhs. The area of the State is 550 square miles, population 2,656.

*Political Agent, I. G. H. d. I. C. S.*

**Kathliwar Agency**—Kathliwar is the peninsula or western portion of the Province of Gujarat, Bombay. Its extreme length is about 220 miles and its greatest breadth about 165 miles, the area being 23,445 square miles. Of this total about 20,882 square miles with a population of 2,496,057 is the territory forming the Political Agency subordinate to the Government of Bombay, established in 1822, having under its control nearly 200 separate States whose chiefs divided amongst themselves the greater portion of the peninsula. The Kathliwar Agency is divided for administrative purpose into four prants or divisions—Jhalawar, Halar, Sorath and Gohelwar—and the States have since 1863 been arranged in seven classes. Since 1822 political authority in Kathliwar has been vested in the Political Agent subordinate to the Government of Bombay. In 1902 the designations of the Political Agent and his Assistants were changed to those of Agent to the Governor and Political Agents of the prants. Before 1863, except for the criminal court of the Agent to the Governor, established in 1831, to aid the Darbars of the several States in the trial of heinous crimes, interference with the judicial administration of the territories was diplomatic, not magisterial, and the criminal jurisdiction of the first and second-class chiefs alone was defined. In 1863, however, the country underwent an important change. The jurisdiction of all the chiefs was classified and defined, that of chiefs of the first and second classes was made plenary, that of lesser chiefs was graded in a diminishing scale. The four Political Agents of the prants resident in the four divisions of Kathliwar, now exercise residuary jurisdiction with large civil and criminal powers. Each Political Agent of a prant has a deputy, who resides at the headquarters of the prant or division, and exercises subordinate civil and criminal powers. Serious criminal cases are committed by the deputies to the court of the Agent to the Governor, to whom also civil and criminal appeals lie. The Agent to the Governor is aided in this work by an officer known as the Political Agent and Judicial Assistant who is usually a member of the Indian Civil Service. Appeals from his decisions lie direct to the Governor of Bombay in Council in his executive capacity. Two Deputy-Assistants also help the Agent.

*Agent to the Governor in Kathliwar, J. S. Eden.*

**Bhavnagar**—This State lies at the head and west side of the Gulf of Cambay. The Gohel Rajputs, to which tribe the Chief of Bhavnagar belongs, are said to have settled in the country about the year 1260, under Sajakji from whose three sons—Ranoji, Saranji and Shahji—are descended respectively the chiefs of Bhavnagar, Lathi and Palitana. An intimate connexion was formed between the Bombay Government and Bhavnagar in the eighteenth century when the chief of that State took pains to destroy the pirates which infested the neighbouring seas. The State was split up by Gujarat and Kathliwar were d. Peshwa.

the Gackwar, but the various claims over Bhavnagar were consolidated in the hands of the British Government in 1807. The State pays an annual tribute of Rs. 1,28,000 to the British Government, Rs. 3,581-8-0 as Peshkash to Baroda and Rs. 22,858 as Zortalbi to Junagadh. H. H. Maharaja Rao Shri Bhavsinhji, K. S. I., is the supreme and final authority in the State. The general administration is conducted under His Highness's directions by the Dewan (M. A. Tana, Acting Dewan) who is assisted by the Naib Dewan, the Personal Assistant and the Judicial Assistant. One noteworthy feature in the administration is the complete separation of judicial from executive functions and the decentralisation of authority is another. The authority and powers of all the Heads of Departments have been clearly defined, and each within his own sphere is independent of the others, being directly responsible to the Dewan.

The chief products of the State are grain, cotton and salt. The chief manufactures are oil, copper and brass vessels and cloth. The Bhavnagar State Railway is 205 miles in length, and the management of it undertakes also the working of the Dhrangadhra State Railway for a length of 21 miles. The capital of the State is the town and port of Bhavnagar, which has a good and safe harbour for shipping and carries on an extensive trade as one of the principal markets and harbours of export for cotton in Kathiawar. Bhavnagar supports 300 Imperial Service Lancers and 282 Infantry or Armed Police.

**Dhrangadhra State** is an uneven tract of land (intersected by small streams) which consists of hilly and rocky ground where stone is quarried. The chief of Dhrangadhra belongs to the Jhala tribe, originally a sub-division of the Makvana family. This tribe is of great antiquity, and is said to have entered Kathiawar from the north establishing itself first at Patri in the Ahmedabad District, thence moving to Halvad and finally settling in its present seat. The greater part of this territory was probably annexed at one time by the Mahomedan rulers of Gujarat. Subsequently, during the reign of the Emperor Aurangzebe (1658-1707), the sub-division of Halvad, then called Muhammadnagar, was restored to the Jhala family. The petty States of Limbdi, Wadhwan, Chuda, Sayla, and Than-Lakhtar in Kathiawar are offshoots from Dhrangadhra, and the house of Wankaner claims to be descended from an elder branch of the same race. His Highness the Maharaja Shri Ghanshyamsinhji is the ruling chief, who is the head of the Jhala Rajput family. The State pays a tribute of Rs. 40,671 to the British Government, and Rs. 4,006 to Junagadh State. The administration is conducted under the Maharaja's directions by the Dewan (Mansinhji of Jhala). The principal crops are cotton and grain. The Capital town is Dhrangadhra, a fortified town, 75 miles west of Ahmedabad.

**Gondal State**—The Chief of Gondal is a Rajput of the Jadeja stock with the title of Thakur Sahib, the present Chief being Sir Bhagvat Singhji, G. C. I. E. The early founder of the State, Kumbhoji I, had a modest estate of 20 villages. Kumbhoji II, the most powerful Chief of the House, widened the territories to

almost their present limits by conquest, but it was left to the present ruler to develop its resources to the utmost and in the words of Lord Reay, Governor of Bombay, by its "importance and advanced administration" to get it recognised as a First Class State. The State pays a tribute of Rs. 1,10,721. The chief products are cotton and grain and the chief manufactures are cotton and woollen fabrics and gold embroidery. Gondal has always been pre-eminent amongst the States of its class for the vigour with which public works have been prosecuted, and was one of the earliest pioneers of railway enterprise in Kathiawar, having initiated the Dhasa-Dhoraji line. It subsequently built other lines in partnership with other Native States in Kathiawar. The Capital is Gondal, a fortified town on the line between Rajkot and Jetalsar.

**Junagadh State**—This State has an area of 3,284 square miles and is bounded on the north by the Barda and Halar and on the west and south by the Arabian Sea. The river Saraswati, famous in the sacred annals of the Hindus, passes through the State. A densely wooded tract called the Gir, is contained in the State and is well known as the last haunt in India of the lion. Until 1472, when it was conquered by Sultan Mahmud Begra of Ahmedabad, Junagadh was a Rajput State, ruled by Chiefs of the Chudasama tribe. During the reign of the Emperor Akbar it became a dependency of Delhi, under the immediate authority of the Mughal Viceroy of Gujarat about 1735, when the representative of the Mughals had lost his authority in Gujarat. Sher Khan Babi, a soldier of fortune, expelled the Mughal Governor, and established his own rule. The ruler of Junagadh first entered into engagements with the British Government in 1807. The Chief bears the title of Nawab, the present Nawab being tenth in succession from the founder of the family. He is His Highness Mahabat Khan, who was born in 1900 and succeeded in 1911. The agricultural products are cotton, shipped in considerable quantities from Veraval to Bombay, wheat and other grains. The coast line is well supplied with fair weather harbours. The State pays a tribute of Rs. 65,604 to the Gackwar of Baroda and the British Government, but the Nawab receives contributions, called zortalbi, amounting to Rs. 92,421 from a number of chiefs in Kathiawar—a relic of the days of Mahomedan supremacy. The State maintains 100 Imperial Service Lancers. The Capital is Junagadh, situated under the Girnar and Datar hills, which is one of the most picturesque towns in India, while in antiquity and historical interest it yields to none. The Uparkot, or old citadel, contains interesting Buddhist caves, and the whole of the ditch and neighbourhood is honeycombed with caves or their remains. There are a number of fine modern buildings in the town.

Administrator, H. D. Rendall, I. C. S.

**Navanagar State**, on the southern shore of the Gulf of Cutch, has an area of 3,791 square miles. The Jam of Navanagar is a Jadeja Rajput by caste, and belongs to the same family as the Rao of Cutch. The Jadejas originally entered Kathiawar from Cutch, and dispossessed the ancient family of Jethwas.

(probably a branch of Jats) then established at Ghumli. The town of Navanagar was founded in 1540. The present Jam Sahib is the well-known cricketer, H. H. Jam Sahib Shri Ranjitsinhji Vibhaji, who was born in 1872 and succeeded in 1907. The principal products are grain and cotton, shipped from the ports of the State. A small pearl fishery lies off the coast. The State pays a tribute of Rs 1,20,093 per annum jointly to the British Government, the Gaekwar of Baroda and the Nawab of Junagadh. The State maintains a squadron of Imperial Service Lancers. The Capital is Navanagar (or Jamnagar) a flourishing place, nearly 4 miles in circuit, situated 5 miles east of the port of Bedi. Population, 349,400. Revenue nearly Rs 40 lakhs.

*Administrator*, during the absence of His Highness at the front, Major Berthon.

*Deewan*, K. B. Merwanji Pestonji.

**Kolaba Agency.**—This Agency includes the State of **Janjira** in the Konkan, a country covered with spurs and hill ranges and much intersected by creeks and backwaters. The ruling family is said to be descended from an Abyssinian in the service of one of the Nizam Shahi Kings of Ahmednagar at the end of the fifteenth century. The most noticeable point in its history is the successful resistance that it alone, of all the states of Western India, made against the determined attacks of the Marathas. The British on succeeding the Marathas as masters of the Konkan refrained from interfering in the internal administration of the State. The chief is a Sunni Mahomedan by race a Sidi or Abyssinian, with a title of Nawab. He has a sanad guaranteeing succession according to Mahomedan law and pays no tribute. Till 1808 the State enjoyed singular independence, there being no Political Agent, and no interference whatever in its internal affairs. About that year the maladministration of the chief, especially in matters of police and criminal justice, became flagrant; those branches of administration were in consequence taken out of his hands and vested in a Political Agent. The present ruler is H. H. Nawab Sidi Sir Ahmed Khan, G.C.L.E., who was born in 1862. The area of the State is 377 square miles, and the population 101,150. The average revenue is

6 lakhs. The State maintains a military force of 228 and an Imperial Service detachment of 29. The capital is Janjira, 44 miles south of Bombay Island. The Chief exercises full powers in Criminal, Civil and Revenue matters of the State including Jagarabad, dependency of the Janjira State in Kathiawar. He is entitled to a dynastic salute of 11 guns.

**Kolhapur Agency.**—Kolhapur is a State with an area of 3,217 square miles and population of 833,441. Subordinate to Kolhapur are nine feudatories, of which the following five are important: Vishalgarh Bayda, Kagal (senior) Kapsi and Ichalkaranji. The present ruling chief Sir Shahu Chhatrapati Maharaja, G.C.S.I., G.C.I.F., G.C.V.O., traces his descent from a younger son of Shivaji founder of the Maratha power. The prevalence of piracy from the Kolhapur port of Malvan compelled the Bombay Government to send expeditions against Kolhapur in 1705, and again in 1792, when the Raja agreed to give compensation for the losses which British merchants had sustained since 1785, and to permit the establishment of factories at Malvan and Kolhapur. Internal dissensions and wars with neighbouring States gradually weakened the power of Kolhapur. In 1812 a treaty was concluded with the British Government, by which, in return for the cession of certain ports, the Kolhapur Raja was guaranteed against the attacks of foreign powers, while on his part he engaged to abstain from hostilities with other States, and to refer all disputes to the arbitration of the British Government. The principal articles of production are rice, jawar and sugar-cane and the manufactures are coarse cotton and woollen cloths, pottery and hardware. The State pays no tribute, and supports a military force of 600. The nine feudatory estates are administered by their holders. Except in the case of two whose holders are minors Kolhapur proper is divided into six pethas or talukas and four mahals and is managed by the Maharaja who has full powers of life and death. The Southern Mahratta Railway passes through the State and is connected with Kolhapur City by a line which is the property of the State.

*Resident and Senior Political Agent for Kolhapur and the Southern Mahratta Country.*—Lt Col F. W. Woodhouse, C.I.E.

**Southern Maratha Country States.**—The Agency consists of the following eight States:—

Name of State	Area in square miles	Population	Tribute to British Government	Average Revenue
Sangli	1,112	227,146	1,25,000	10,75,776
Miraj (Senior)	339	80,281	12,507	3,12,000
Miraj (Junior)	210	26,490	7,000	2,35,000
Kurundwad (Senior)	185	38,075		1,45,000
Kurundwad (Junior)	114	34,004	9,000	1,75,000
Bamkhandi	524	100,004	20,515	6,45,000
Mudhol	68	62,801	2,071	2,50,000
Ramdruc	169	57,610		1,50,000
<b>Total</b>	<b>3,021</b>	<b>616,121</b>	<b>1,87,700</b>	<b>2,76,776</b>

**Mahi Kantha**—This group of States has a total area of 3,124 square miles and a population of 412,631. The revenue is about 14 lakhs. The Agency consists of the first class State of Idar and 62 small States. The Native State of Kār covers more than half the territory, eleven other States are of some importance, and the remainder are estates belonging to Rajput or Koli Thakurs, once the lawless feudatories of Baroda, and still requiring the anxious supervision of the Political Officer. H. H. Major General Sir Partab Singh, a Rajput of the Rathor Clan, having been appointed regent of the State of Jodhpur, resigned the gadi of Idar in June 1911 and was succeeded by his adopted son Daulatsinhji. Many relatives of the Maharaja and feudal chiefs whose ancestors helped to secure the country for the present dynasty, now enjoy large estates on service tenures, and there are numerous petty chiefs or *bhumias* who have held considerable estates from the time of the Raos of Idar, or earlier, and are under no obligation of service. The revenues of the State are shared by the Maharaja with these feudal chiefs. The Maharaja receives Rs 52,427 annually on account of Kichehdi and other Raj Haks from its subordinate Sardars, the tributary Talukas of the Mahi Kantha Agency and others, and pays Rs 30,340 as tribute to the Gaekwar of Baroda through the British Government. The subordinate Sardars of Idar, known locally as *pattawat*, hold their estates on condition of military service, the quota being three horse-men for every 1,000 Rupees of Revenue, but for many years this service has not been exacted and no military force is maintained at present.

*Political Agent*—Lt.-Col. J. R. B. Graham Carter

**Nasik Agency**—This consists of one State Surgana, lying in the north-west corner of the Nasik District. Surgana has an area of 360 square miles and a population of 15,180. The ruling chief is Prataprav Shankarrao Deshmukh, who is descended from a Maratha Pawar family. He rules the State subject to the orders of the Collector of Nasik. The revenue of the State is about Rs 23,000.

**Palanpur Agency**—This group of States in Gujarat comprises two first class States, Palanpur and Radhanpur, and a few minor States and petty talukas. Its total area is 6,393 square miles and the population is 515,092. The gross revenue is about 14½ lakhs. The territory included in the Agency has, like the more central parts of Gujarat, passed during historical times under the sway of the different Rajput dynasties of Anhilvada, the early Khilji and Tughlak Shahi dynasties of Delhi, the Ahmedabad Sultans, the Mughal Emperors, the Marhattas, and lastly the British. The State from which the Agency takes its name is under the rule of H. H. Nawab Sher Muhammad Khan, G.C.I.E., who is entitled the Dewan of Palanpur. He is descended from the Lohanis, an Afghan tribe who appeared in Gujarat in the fourteenth century. The connection of the British Government with the State dates from 1819 in which year the chief was murdered by a body of nobles. Two high roads from Ahmedabad pass through

the State and a considerable trade in cotton cloth, grain, sugar and rice is carried on. The State maintains a military force of 600 and pays tribute of Rs 78,000 to the Gaekwar of Baroda. The capital is Palanpur situated at the junction of the Palanpur-Dessa Branch of the B. B. & C. I. Railway. It is a very old settlement of which mention was made in the eighth century.

*Political Agent*—Major N. S. Coghlin

**Radhanpur** is a State, with an area of 1,150 square miles, which is now held by a branch of the Babi family, who since the reign of Humayun have always been prominent in the annals of Gujarat. The present chief is H. H. Jalal-ud-din Khanji, the Nawab of Radhanpur. He has powers to try his own subjects even for capital offences without permission from the Political Agent. The State maintains a military force of 200. The principal products are cotton, wheat and grain. The capital is Radhanpur town, a considerable trade centre for Northern Gujarat and Cutch.

**Rewa Kantha Agency**—This Agency, with an area of 4,056 square miles and a population of 665,000, comprises 61 States, of which Rajppla is a first class State, 5 are second class, one is third class and the rest are either petty States or talukas. Among those petty States are Kadana and Sanjeli in the north, Bhadarva and Umeta in the west, Narukot in the south-east, and three groups of Mehwas. The 26 Sankheda Mehwas petty estates lie on the right bank of the Narbada, while the 24 Pandu Mehwas petty estates including Dorka, Anghad and Raika, which together form the Dorka Mehwas are situated on the border of the Mahi.

The following are the statistics of area and population for the principal States—

Taluka or Petha	Area in square miles	Population
Balasnor	189	40,563
Bariya	813	115,350
Chhota Udaipur	873	103,639
Lunavada	388	75,998
Narukot (Jambhughoda)	143	8,485
Rajppla	1,517	161,588
Sunth	394	50,350
Other Jurisdictional States, Civil Stations and Thana Circles	639	100,126

Under the first Anhilvada dynasty (746-961), almost all the Rewa Kantha lands except Champaner were under the government of the Bafiyas, that is, Koli and Bhil chiefs. In the eleventh, twelfth and thirteenth centuries chiefs of Rajput or part Rajput blood, driven south and east by the pressure of Muhammadan invasions, took the place of the Koli and Bhil leaders. The first of the present States to be established was the house of the Raja of Rajppla.

*Political Agent*—J. P. Brander.



**Surat Agency**—This is a small group of three second class States under the superintendence of the Collector of Surat, W. F. Hudson

State.	Ruling Chief.	Area in sq miles	Population
Dharampur	Maharana Shri Mohandevji Narayandevji	6701	114,995
Brandsa	Maharaja Shri Indrasinhji Pratapsinhji	215	44,594
Sachin	Nawab Sidi Ibrahim Muhammad Yakut Khan Mubazarat Daula Naserat Jung Bahadur	12	18,903

The joint revenue of these states is 16½ lakhs. Tribute is paid to the British Government of Rs. 9,154. There is also attached to this Agency a tract of country known as the Dangs, which has an area of 999 square miles and a population of 29,353 and a revenue of Rs. 30,000. The country is divided into 14 Dangs or States of very unequal area, each under the purely nominal rule of a Bhil Chief with the title of Raja, Naik, Pradhan or Powar.

**Thana Agency**—This includes the State of Jawhar, in the Thana District, on a plateau above the Konkan plain. It has an area of 310 square miles and a population of 53,489

and revenue of 2 lakhs. Up to 1291, the period of the first Mahomedan invasion of the Deccan, Jawhar was held by a Varli, not a Koli chief. The first Koli chief, obtained his footing in Jawhar by a device similar to that of Dido, when she asked for and received as much land as the hide of a bull would cover. The Koli chief cut a hide into stripes, and thus enclosed the territory of the State. The present chief is Raja Kri-hnashah Patangshah who administers the State, assisted by a Karbhar under the supervision of the Collector of Thana, S. M. Bharucha, who is Political Agent of the State.

## UNDER THE GOVERNMENT OF BENGAL

**Cooch Behar**—This State is a low-lying plain in North Bengal. It has an area of 1,307 square miles, a population of 5,93,052 and revenue of 27 lakhs. The ruling chief is H. H. Maharaja Itendra Narayan Bhup Bahadur, who succeeded in 1913. His family is of Tibetan or Dravidian origin. He administers the State with the assistance of the State Council. Cooch Behar once formed part of the famous kingdom of Kamarupa. British connexion with it began in 1772 when the succession was disputed and the assistance of the East India Company invited. The chief products of the State are rice, jute and tobacco. It maintains a military force of 194. The capital is Cooch Behar, which is reached by the Cooch Behar State Railway, a branch from the Eastern Bengal State Railway System.

**Hill Tippera**—This State lies to the south of the district of Sylhet and consists largely of hills covered with bamboo jungles. It has an area of 4,036 square miles and a population of 229,613. The revenue from the State is about 10 lakhs and from the Zemindari in British territory a slightly smaller sum. The present Raja is Birendra Kishore Deb Barman Manikya, who is a Kshatriya by caste and comes of the Lunar race. The military

prestige of the Tippera Rajas dates back to the fifteenth century and a mythical account of the State takes the history to an even earlier date. Both as regards its constitution and its relations with the British Government, the State differs alike from the large Native States of India, and from those which are classed as tributary. Besides being the ruler of Hill Tippera, the Raja also holds a large landed property called Chakla Roshnabad, situated in the plains of the Districts of Tippera, Nakhail and Sylhet. This estate covers an area of 600 square miles, and is held to form with the State an indivisible Raj. Disputes as to the right of succession have occurred on the occasion of almost every vacancy in the Raj, producing in times gone by disturbances and domestic wars and exposing the inhabitants of the hills to serious disorders and attacks from the Kukis, who were always called in as auxiliaries by one or other of the contending parties. The principles which govern succession to the State have recently, however, been embodied in a sanad which was drawn up in 1904. The chief products of the State are rice and cotton, the traffic being carried chiefly by water. The administration is conducted by the Minister at Agartala assisted by the Dewan. Political Agent J. Bartlett, I.C.S.

## UNDER THE GOVERNMENT OF BIHAR AND ORISSA

Under this Government there are the Chota Nagpur political States of Kharsawan and Seraikela, and the Orissa feudatory States, 24 in number. The total area is 28,648 square miles, and the total population 3,942,972. The revenue is about 54 lakhs. The inhabitants are hill-men of Kolarian or Dravidian origin, and their condition is still very primitive. The chief of Kharsawan belongs to a junior branch of the Porahat Raja's family. The State first came under the notice of the British in 1793, when, in consequences of disturbances on the

frontier of the old Jungle Mahals, the Thakur of Kharsawan and the Kunwar of Sarakela were compelled to enter into certain agreements relating to the treatment of fugitive rebels. The chief is bound, when called upon, to render service to the British Government, but he has never had to pay tribute. His present sanad was granted in 1899. He exercises all administrative powers, executive and judicial, subject to the control of the Deputy Commissioner of Singhbhum and the Commissioner of Chota Nagpur. The Bengal Nagpur Rail-

**Surat Agency**—This is a small group of three second class States under the supervision of the Collector of Surat W. R. Hudson

State	Ruling Chiefs	Area in sq miles	Popula- tion
Dharampur	Maharaja Shri Mohandevji Narayandevji	9701	114,995
Bansda	Maharaj Sati Ibrahim Muhammad Khan Mubarakat Daula Naerat Jung Bahadur	215	44,591
Sachin		12	18,903

The joint revenue of these states is 16½ lakhs. Tribute is paid to the British Government of Rs. 9,54. There is also attached to this Agency a tract of country known as the Dangs, which has an area of 999 square miles and a population of 29,353 and a revenue of Rs. 30,000. The country is divided into 14 Dangs or States of very unequal area, each under the purely nominal rule of a Bhil Chief with the title of Raja, Nakh, Pradhan or Povan. Thana Agency—This includes the State of Jawhar, in the Thana District, on a plateau above the Konkan plain. It has an area of 810 square miles and a population of 53,439. It Bhimtha, who is Political Agent of the

UNDER THE GOVERNMENT OF BENGAL

**Cooch Behar**—This State is a low-lying plain in North Bengal. It has an area of 1,307 square miles, a population of 5,93,002 and revenue of 27 lakhs. The ruling chief is H H Maharaja Itendra Naryan Bhup Bahadur, who succeeded in 1913. His family is of Tibetan or Dravidian origin. He administers the State with the assistance of the State Council. Cooch Behar once formed part of the famous kingdom of Kamrupa. British connexion with it began in 1772 when the succession was disputed and the assistance of the East India Company invited. The chief products of the State are rice, jute and tobacco. It maintains a military force of 194. The capital is Cooch Behar which is reached from the Cooch Behar Railway, a branch from the Eastern Bengal State Railway System.

**Hill Tippera**—This State lies to the south of the district of Sylhet and consists largely of hills covered with bamboo jungles. It has an area of 4,988 square miles and a population of 229,613. The revenue from the State is about 10 lakhs and from the Zemindari in British territory a slightly smaller sum. The present Raja is Birendra Krishore Deb Barmah Manikya, who is a Kshatriya by caste and comes of the Lunar race.

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UNDER THE GOVERNMENT OF BIHAR AND ORISSA

Under this Government there are the Chota Nagpur political States of Kharsawan and Seraikela, and the Orissa feudatory States, 24 in number. The total area is 28,648 square miles, and the total population 3,94,292. The revenue is about 54 lakhs. The inhabitants are hill-men of Kolarian or Dravidian origin, and their condition is still very primitive. The chief of Kharsawan belongs to a junior branch of the Porhat Raja's family. The State first came under the notice of the British in 1793, when, in consequence of disturbances on the frontier of the old Jungle Mahals, the Thakur of Kharsawan and the Kunwar of Sarikela were compelled to enter into certain agreements relating to the treatment of fugitive rebels. The chief is bound, when called upon, to render service to the British Government, but he has never had to pay tribute. His present squad was granted in 1899. He exercises all administrative powers, executive and judicial, subject to the control of the Deputy Commissioner of Singbhum and the Commissioner of Chota Nagpur. The Bengal Nagpur Rail-



are included under this Government —

State	Area	Popu- lation	Revenue in lakhs
Rampur	892	531,898	45
Tehri (Garhwal)	4,200	299,833	6
Deonares	988		

Rampur in Rohilkhand is a level fertile tract of country. Its early history is that of Rohilkhand. The adopted son of a Rohilla, who had distinguished himself in the Afghan wars, obtained the title of Nawab and the grant of the greater part of Rohilkhand in 1790. Subsequently the State was divided amongst his sons and on the cession of Rohilkhand to the British Government in 1801 the family holding Rampur were confirmed in their possessions. The Nawab at the time of the Mu- they received a grant of land for his answering

we runs through a part of the state. The adjoining strip of territory is held by the ruler branch of the Porahat Raj's family. Orissa Feudatory States—This group of 22 dependent territories is situated between the Mahanadi Delta and the Central Provinces, and forms the mountainous back-ground of Orissa. The names of the individual States are Athgarh, Jajpur, Mayurbhanj, Nalgiri, Konyhar, Pal Lahara, Dhankar, Vemgiri, Hindol, Narasingpur, Baramana, Jirga, Khandapuri, Nayagarh, Ranpur, Daspalla, and Boud. To these there were added in 1905 the following States: Boudpur, Khandapuri, Patana, and Khandapuri from the Central Provinces, and Ganjam and Boud from the Chota Nagpur State. The total population in 1911 was 1,250,000 with a revenue of about 45 lakhs. The Tributary States have no connected or authentic history. Comprising the western and hill portions of the province of Orissa they were never brought under the central government, but from the earliest times consisted of numerous petty principalities which were more or less independent of one another. They were first inhibited by aboriginal tribes, who were divided into immovable communal or tribal groups each under its own chief or headman. These carried on incessant warfare with their neighbours on the one hand and with the wild beasts of the forests on the other. In course of time their hill retreats were penetrated by Aryan and Aryanized tribes, who gradually overthrew the tribal chiefs and established themselves in their place. Tradition relates how these daring interlopers, come to Pur on a pilgrimage and remained behind to found kingdoms and dynasties. It was thus that Jirga became ruler of Mayurbhanj over 1300 years ago, and was succeeded by his eldest son, while his second son seized Konyhar. The chiefs of Boud and Daspalla are said to be descended from the same stock, and a Rajput origin is also claimed by the Rajas of Athgarh, Narasingpur, Pal Lahara, Jajpur and Tigris. Nayagarh.

## UNDER THE GOVERNMENT OF THE UNITED PROVINCES.

It is alleged, was founded by a Rajput from Kewani, and a section of the same family was the ancestor of the present house of Khandapuri. On the other hand, the chiefs of a few states, such as Athgarh, Baramana and Dhenkanal, owe their origin to favourable or distinguished servants of the ruling sovereigns of Orissa. The State of Rampur is believed to be the most ancient, the list of its chiefs covering a period of over 3,600 years. It is noteworthy that this family is admittedly of Khandapuri origin, and furnishes the only known instance in which, amid many vicissitudes, the supremacy of the original settlers has remained intact. The States acknowledged the suzerainty of the paramount power and were under an implied obligation to render assistance in resisting invaders, but in other respects neither the ancient kings of Orissa nor their successors, the Alingals and Marathas, ever interfered with their internal administration. All the States have annals of the dynasties that have ruled over them, but they are made up in most part of legend and fiction and long genealogical tables of doubtful accuracy, and contain very few features of general interest. The British conquest of Orissa from the Marathas, which took place in 1803, was immediately followed by the submission of ten of the Tributary States the chiefs of which were the first to enter into treaty engagements. The staple crop in these States is rice. The best timber producing tracts in India, but for many years were at one time among the upholders. The States have formed the subject of frequent legislation of a special character. The relations with the British Government are governed mainly by the sanads granted in similar terms to all the chiefs in 1804. They contain ten clauses relating to the rights, privileges, duties and obligations of the chiefs, providing for the settlement of boundary disputes, and indicating the nature and extent of the control of the Political Agent who is also the Commissioner of the Orissa Division. Political Agent L. D. Cobden-Bennet.

loyalty. The present Nawab is Colonel H. H. Amir Hamid Ali Khan Bahadur, G.C.B., G.C.V.O. A.D., who was born in 1875 and succeeded in 1889. He is the sole surviving representative of the Rohilla power and is the premier chief in the United Provinces. Since 1889 a native official or the United Provinces, called the Minister, has been lent to the State. He presides over a Legislative Committee first formed in 1902. The principal crops are maize, wheat, rice and sugar cane. The most important industry is the weaving of cotton cloth. The Gaud and Rohilkhand Railway crosses the State. Three squadrons of cavalry are maintained, of which two, 317 strong, are Imperial Service Lancers. The local force includes about 1,900 infantry and 200 artillery. The capital is Rampur on the left bank of the Kosi, 851 miles by rail from Calcutta. Income, 45 lakhs. Area, 502 square miles. Population, 5,121,700. Political Agent L. D. Cobden-Bennet.

**Tehrī State** (or Tehrī Garhwal)—This State lies entirely in the Himalayas and contains a tangled series of ridges and spurs radiating from a lofty series of peaks on the border of Tibet. The sources of the Ganges and the Jutna are in it. The early history of the State is that of Garhwal District, the same dynasty Banduman Shah, the last Raja of the whole territory, was killed in battle, fighting against the Gurkhas, but at the close of the Nepalese War in 1815, his son received from the British the present State of Tehrī. During the Mutiny the latter rendered valuable assistance to Government. He died in 1859 without issue, and was succeeded by his near relative Bhanuani Shah, and he subsequently received a sanad giving him the right of adoption. The present Raja Sir Sirti Shah, K.C.S.I., was installed in 1894. The principal product is rice, grown on terraces on the hill-sides. The State forests are very valuable and there is considerable export of timber. The Raja has full powers within the State, executive authority being vested in an officer called the Wazir. A military force of 113 strong is maintained. The capital is Tehrī, the summer capital being Pratapnagar 8,000 feet above the sea level. *Political Agent*—The Commissioner of Kumaon.

**Benares**—The founder of the ruling family of Benares was one Ahana Ram, who entered the service of the Governor of Benares under the Nawab of Oudh in the early eighteenth century. His son, Balaut Singh, conquered the neighbouring countries and created a big state out of them over which he ruled till 1770.

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## UNDER THE GOVERNMENT OF THE PUNJAB.

**Bahawalpur**—This State, which is about 300 miles in length and about 40 miles wide, is divided lengthwise into three great strips. Of these, the first is a part of the Great Indian Desert, the central tract is chiefly desert, not capable of cultivation, identical with the Bar or Pat uplands of the Western Punjab, and the third, a fertile alluvial tract in the river valley, is called the Sind. The ruling family claims descent from the Abbasid Khalifs of Egypt. The tribe originally came from Sind, and assumed independence during the dismemberment of the Durani empire. On the rise of Ranjit Singh, the Nawab made several applications to the British Government for an engagement of protection. These, however, were declined, although the Treaty of Lahore in 1809, whereby Ranjit Singh was confined to the right bank of the Sutlej, in reality effected was negotiated in 1833, the year after the treaty with Ranjit Singh for regulation of trade on the Indus. It secured the independence of the Nawab within his own territories, and opened up the trade on the Indus and Sutlej. During the first Afghan War the Nawab rendered assistance to the British and was rewarded by a grant of territory and life pension. On his death the succession was disputed and for a time the State was in the hands of the British. The present Nawab is H. H. Nawab Sadik Muhammad Khan, who was born in 1904 and succeeded in 1907. During his minority the State is managed by a Council of Regency. The chief crops are wheat, rice and millet. The

Under this Government there are 34 states, varying considerably in size and importance. Area, 36,532 square miles. Population (1911), 4,212,794. Revenue, about £1,000,000. The Punjab states may be grouped under three main classes. The hill States, 23 in number, lie among the Punjab Himalayas and are held by some of the most ancient Rajput families in all India. Along the western half of the southern border lies the Alhammadian state of Bahawalpur. The remaining States, including the Sikh principalities of Fataha, Jind, Nabha, Kapurthala, Faridkot and Kalsha, and the Alhammadian chiefs of Maler Kotla, Pataudi, Loharu and Dujana, lie east of Lahore, and, with insignificant exceptions, occupy the centre of the eastern plains of the province. The last below gives details of the area, population, and revenue of the more important states—

Name	Area square miles	Population	Approximate Revenue in lakhs
Bahawalpur	15,000	780,394	27
Chambakot	3,210	134,351	7
Faridkot	642	130,374	8
Jind	1,559	271,728	15
Kapurthala	630	208,244	25
Malér Kotla	167	71,144	4
Mandi	1,200	181,110	5
Nabha	928	248,892	15
Patalla	5,412	1,407,659	72
Sirmur (Nahan)	1,198	138,564	8

Salwar Khwari branch of the North Western State Railway passes through the State. It is supported by an Imperial Service Silladar section of the Punjabian houses. It lies mainly in the great natural tract called the Jangal (desert or forest), but stretches north-east into that known as the Parnath and southwards across the Ghaggar into the Nardak, while its southernmost tract round the ancient town of Jind, claims to lie within the sacred limits of Kurushetra. This vast tract is not, however, the exclusive property of the States, for in its several islands of British territory, and the State of Maler Kotla enters the centre of its northern border. On the other hand, the States hold many outlying villages surrounded by British territory.

The history of Jind as a separate State dates from 1760 when the confederated Sikhs captured Shind town and partitioned the whole Jind Province. The Maharaja of Jind, H. H. Maharaja Sir Kanbir Singh, R. C. S. I., was born in 1879 and succeeded in 1887. He is descended from the ancestors of the Phulkian family. During the Sikh War and the Mutiny the Raja was rewarded with a grant of nearly 600 square miles of land. The principal crops are wheat, barley and gram. The only industries of importance are the manufactures of gold and silver ornaments, leather and woodwork and cotton cloth. The capital is Sangrur which is connected by a State Railway with the North-Western Railway. The administration of the State is divided between four departments under heads of departments which form together a State Council controlled by the Maharaja.

Under the Moghals it became tributary to the empire but its internal administration was not interfered with, and it escaped almost unscathed from Sikh aggression. The state first came under British influence in 1840, the part west of the Ravi, was at first handed over to Kashmir, but subsequently the boundaries of the State were fixed as they now stand, and it was declared independent of Kashmir. The present chief is H. H. Raja Sir Bhure Singh, R. C. S. I., who was born in 1890 and succeeded in 1901. The principal crops are rice, maize and millets. There are some valuable forests which were partly leased to Government in 1901 for a term of 99 years but the management of them has now been restricted to the Chamba Durbar. The mountain ranges are rich in minerals which are little worked. The principal road to Chamba is from Pethankot, the terminus of the Amritsar Pethankot branch of the North-Western Railway. The Raja is head of the judicial department and is assisted by the Mazari-Wazars (Chamba town, on the right bank of the Ravi), contains a number of interesting temples, of which that of Lakshtmi Narayan, dating possibly from the tenth century, is the most famous.

Faridkot.—The ruling family of this sandy level tract of land belongs to the Sidhu-Barar clan of the Jats, and is descended from the same stock as the Phulkian houses. Their occupation of Faridkot and Jot Kapura dates from the time of Akbar, though quarrels with the surrounding Sikh States and internal dissensions have greatly reduced the patrimony. The present chief, H. H. Raja Brij Indar Singh Bahadur, was born in 1898 and succeeded in 1906. During his minority the administration is carried on by a Council under the presidency of an Extra Assistant Commissioner. The State supports one company of Imperial Service Sappers.

Jind.—The three Native States of Jind, Patiala and Nabha form collectively the Phulkian States of the Punjab. The State supports one company of Imperial Service Sappers. The present chief, H. H. Raja Brij Indar Singh Bahadur, was born in 1898 and succeeded in 1906. During his minority the administration is carried on by a Council under the presidency of an Extra Assistant Commissioner. The State supports one company of Imperial Service Sappers.

A small proportion of the population however are Sikhs, the majority being Mohammedans and Sindh, the majority being wheat, gram, maize, cotton and sugarcane. The town of Sultanpur in this State is famous for hand-painted cloths. The main line of the North-Western Railway passes through part of the State and the Great Trunk Road runs parallel to it. A branch railway from Jullundur City to Derogahpur passes through the State. Kapurthala maintains a battalion of Imperial Service Infantry and a small force of local troops. The capital is Kapurthala, which is said to have been founded in the eleventh century.

Agent to the Lieutenant-Governor for Kapurthala, the Commissioner of the Jullundur Division

**Malter Kotla**—This State consists of a level sandy plain bounded by the district of Ludhiana on the north and by Patiala territory elsewhere. The Nawabs of Malter Kotla

are of Afghan descent, and originally held positions of trust in the Sindh province under the Moghal Emperors. As the Empire sank into decay during the eighteenth century, the local chiefs gradually became independent.

The result was constant feuds with the adjacent Sikh States. After the victory of Laswari, and the subjugation and flight of Holkar in 1803, gained by the British over Sindhia in 1803, the British army, the British Government succeeded to the power of the Malter Chiefs in the districts between the Sutlej and the Juma.

The final treaty which affirmed the dependence of the State on the British Government was signed after the submission of Ranjit Singh in 1809. The present Nawab is II Nwab Ahmad Ali Khan Bahadur, who was born in 1881 and succeeded in 1908. The chief products are cotton, sugar and opium. The State supports one company of Imperial Service Sappers. The capital is Malter Kotla.

**Mandi**—This is a mountainous State in the upper reaches of the Beas. It has a history of considerable length, as it once formed part of the Suket State. Its relations with the British were determined after the battle of Sobroin in 1846. The present minor chief is H. Raj Jogindra Sen, who was installed in 1913. The administration is carried on by Mr H. W. Emerson, I.C.S., the Superintendent and Sardar Amar Singh. The principal crops are rice, maize, wheat and millet. About three fifths of the State are occupied by forest and grazing lands. It is rich in minerals. The capital is Mandi, founded in 1527, which contains several temples and other buildings of interest and is one of the chief marts for commerce with Ladakh and Yarkhand.

**Nabha**—Nabha is one of the Pothoharian States. It consists of two distinct parts, the main portion comprising 12 separate pieces of territory scattered among the other two Pothoharian States of Patiala and Jind. The second portion forms the *razmah* of Bahawal in the extreme south-east of the Punjab. It became a separate State in 1763. After the victory of Sobroin, the chief was deposed and about a quarter of his territory was confiscated for his loyalty during the Mutiny the chief

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was rewarded with territory which forms the present Bahawal Nizamut. The present chief is H. II Alabazir Khanman Singh Malwani Bahadur, who was born in 1883 and succeeded in 1911. He was assisted in the administration by a council of three members who also acts as a court of appeal. The State supports one battalion of Imperial Service Infantry. The State is traversed by the Western Railway. The Kapurthala Malwani crosses Bahawal. The chief crops are gram, wheat and pulses, the chief industries are manufactures of silver and gold ornaments and brass utensils.

**Patiala**—This is the largest of the Pothoharian States, but its territory is scattered and interspersed by small cities and even single villages belonging to other villages and British districts. Its history as a separate State begins in 1762. During the Sikh War and the Mutiny the Maharaja was loyal and was substantially rewarded. The present Chief H. II Maharajadhiraj, Sri Sri Bhupinder Singh Malwani Bahadur, a C.I.E., was born in 1861 and succeeded in 1900. During his minority his administration was exercised by a council of regency consisting of three members. The principal crops are gram, barley and wheat. Cotton and tobacco are also grown in parts of the State. It possesses valuable forests. The State is rich in antiquities especially at Pinjaur, Sunam and Sirhind. The North-Western Railway crosses the State. It contains an Imperial Service contingent, of a regiment of cavalry and two battalions of Infantry.

In 1900 it was decided by the Government of India to appoint a Political Agent for Patiala and the other two Pothoharian States of Jind and Nabha were included in the Agency, to which was afterwards added the Mohammedan State of Bahawalpur. The headquarters of the Agency are at Patiala.

**Sirmur (Nahan)**—This is a hilly State in the Himalayas under the Political control of the Commissioner of Ambala Division. Its history is said to date from the 11th century. In the eighteenth century the State was able to repulse the Gurkha invasion but in 1793 the Gurkhas were invited to aid in the suppression of an internal revolt in the State and they in turn had to be evicted by the British. In 1857 the Raja rendered valuable services to the British, and during the second Afghan War he sent a contingent to the North-West Frontier. The present chief is H. H. Raja Amar Parkash Bahadur, I.C.S.I., who was born in 1888 and succeeded in 1911. The main agricultural feature of the State is the recent development of the Kharida Dun, a fertile level plain which produces wheat, gram, maize and other crops. The State forests are valuable and there is an iron foundry at Nahan which was started in 1867 but, being unable to compete with the imported iron, is now used for the manufacture of sugar-cane crushing mills. The State supports an Imperial Service Corps of Sappers and Miners which served in the Tirah Expedition of 1897 and is at present engaged for his loyalty during the

active service in the European War.

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The staple crop of the country is rice. Forests of great variety cover the whole of the hill ranges. **Khasi and Jaintia Hills**—These petty chieftships, 25 in number, with a total area of about 3,600 square miles and a population of 126,000, are included under the Government of Assam. Most of the States have treaties or engagements with the British Government. The largest of them is Jaintia, the smallest is Nongkewar, which has a population of 169. The States are ruled by a chief or Siam. The Siamship usually remains in one family, but the succession was originally controlled by a small electoral body constituted from the heads of certain priestly clans. Of recent years there has been a tendency to broaden the elective basis, and the constitution of a Khasi State has always been of a very democratic character, a Siam exercising but little control over his people. Among many of the north-east frontier tribes there is little security of life and property, and the people are compelled to live in large villages on sites selected for their defensive capabilities. The Khasis seem, however, to have been less distressed by internal warfare, and the villages, as a rule, are small.

## UNDER THE GOVERNMENT OF CENTRAL PROVINCES.

The Central Provinces include fifteen feudatory States subordinate to the administration, with an area of 31,174 square miles and a population of 2,117,002. One of the States, Malkaj, lies within Hosangabad District, the remainder are situated in the Chinatsgarh Division, to the different Districts of which they were formerly attached. Their relations with the Government are controlled by a Political Agent. The States vary greatly in size and importance. Sakhi the smallest, having an area of 138 square miles and Bastar the largest an area of 14,062 square miles. They are administered by hereditary chiefs, who hold on conditions of loyalty and good government set forth in patents and acknowledgments of fealty, but are nominally free from direct interference save in the case of sentences of death, which require the Chief Commissioner's confirmation. But, as a fact, the Government has exercised a very large amount of control, owing mainly to the frequency with which the States have been taken under direct management, because of either the minority or the misconduct of the chief. The States pay a tribute to Government which amounts in the aggregate to about 2½ lakhs. Statistics relating to the chief States are contained in the following table—

State.	Area.	Population 1911	Revenue (approximate) in lakhs
Bastar	13,062	433,310	3
Important	1,963	174,458	1
Kanker	1,499	127,014	2
Khairagarh	931	153,471	3
Nandgaon	871	167,362	4
Bargarh	1,418,860	218,860	2
Surjuga	6,055	248,703	2
Eight other States	5,377	411,824	6
Total	31,174	2,117,002	23

**Bastar**—This State, which lies to the south-east corner of the Provinces, is the most important of the group. It has an area of 13,002 square miles and a population of 433,310. The family of the Raja is very ancient, and is stated to belong to the Rajputs of the Lunar race. Up to the time of the Marathas, Bastar occupied an almost independent position, but the wild Kora tribe being a perpetual source of trouble. A band of them committed several murders and robberies in 1910.

**Surjuga**—Until 1905 this was included in Chota Nagpur State of Bengal. The most important feature is the Manjipat, a magnificent tableland forming the southern barrier of the State. The early history of Surjuga is obscure, but according to a local tradition in Palamanu, the present ruling family is said to be descended from a Khasi Raja of Pala-manu. In 1758 a Marathi army overran the State, and compelled its chief to acknowledge himself a tributary of the Bhonsla Raja. At the end of the eighteenth century, in consequence of the chief having aided a rebellion in Palamanu against the British, an expedition entered Surjuga, and, though order was temporarily restored, disputes again broke out between the chief and his relations, necessitating British interference. Until 1818 the State continued to be the scene of constant lawlessness, but in that year it was ceded to the British Government under the provisions of the agreement concluded with Muddhoji Bhonsla of Berar, and order was soon established. The principal crops are rice and other cereals. The population is mainly aboriginal, the wild Kora tribe being a perpetual source of trouble. A band of them committed several murders and robberies in 1910.

STAFFS - FIVE, FOUR, THREE, TWO, ONE, TO THE GOVERNMENT OF INDIA

It was announced at the Coronation Durbar of 1911 that there would in future be no Nazrana payments on successions. The details given above are for 1911-12. In 1915 the tribute amounted to £ 607,100

## Foreign Possessions in India.

Portugal and France both hold small territorial possessions in the Indian Peninsula. The Portuguese possessions in India consist of the province of Goa, situated within the limits of the Bombay Presidency, on the Arabian Sea coast, the small territory of Damann on the Gujarat coast, at the entrance to the Gulf of Cambay, and the little island of Diu, lying off the southern extremity of the Kathiawar Peninsula.

Goa forms a compact block of territory surrounded by British districts. Savantwadi state lies to the north of it, the Arabian Sea on the west and North Kanara on the south, and the eastern boundary is the range of the Western Ghats, which separates it from the British districts of Belgaum and North Kanara. The extreme length from north to south is 62 miles and the greatest breadth from east to west 40 miles. The territory has a total area of 1,801 square miles and comprises the island of Goa, acquired by the Portuguese in 1510, the division of Velhas Conquistas, or old Conquistas, comprising the neighbouring districts of Bardes and Salsette, acquired in 1543, and the Novas Conquistas, or New Conquistas, comprising the districts of Pernem, Bicholim or Batagram, Satar, Ponda or Antuz, Zambaulm or Pancham, and Canacona or Advora, acquired in the latter half of the 18th century. The small island of Andruv, situated opposite the port of Karwar, in the British district of North Kanara, forms administratively a portion of the province of Goa. This was acquired in 1505. The whole country is hilly, especially the western portion, the predominating physical feature being the Western Ghats, which besides bounding the country along the north-east and south-east, jut off westward and spread across the country in a succession of spurs and ridges, of which the highest, Sonagur, is 3,827 feet high. The country is intersected by numerous rivers running westward from the Ghats, and the principal eight, which are all navigable, are in size of some importance. Goa possesses a fine harbour, formed by the promontories of Bardes and Salsette. Half-way between these extremities lies the *gabo*, or cape, which forms the extremity of the island of Goa. This divides the whole bay into two anchorages, known as Agada and Lammaog. Both are capable of accommodating the largest shipping from September to May, but Agada is virtually closed during the south-west monsoon, owing to the high winds and sea and the formation of sand bars across the estuary of the Mandavi river, which opens into Agada. Lammaog is accessible at all times and is therefore the harbour of commercial importance. It is the terminus of the railway running to the coast from the inland British system of lines, a branch water and port have been built there and the trade is considerable, being chiefly transit trade from British territory.

**The People**

The total population in the whole Goa territory was 475,313 at the census of 1900. This State is densely populated, and the population showed an increase of 6 per cent since the census ten years previously. In the Velhas Conquistas 91 per cent of the population is Christian. In the Novas Conquistas Christians and Hindus are almost equally numerous. The Moslems in the territory are numbered in a few thousands. The Christians still very largely adhere to caste distinctions, claiming to be Brahmans, Chastadras and low castes, which do not intermarry. The Hindus are largely Marathas and do not differ from those of the adjacent Konkan districts of Bombay. All classes of the people, with the exception of Europeans, use the Konkan dialect of Marathi, with some admixture of Portuguese words. The official language is Portuguese, which is commonly spoken in the capital and the principal towns, as well as by all educated people. Nearly all the Christians profess the Roman Catholic religion and are spiritually subject to an archbishop, who has the titles of Primate of the East and Patriarch of the East Indies and exercises ecclesiastical jurisdiction also over a great portion of British India. (The Christians of Damann and Diu are subject to a Bishop who bears the titles of Bishop of Damann and Archbishop of Cranganore.) There are numerous churches in Goa, mostly built by the Jesuits and Franciscans prior to the extinction of the religious orders in Portuguese territory. The churches are in charge of secular priests. Hindus and Mahomedans now enjoy perfect freedom in religious matters and have their own places of worship. In the early days of Portuguese rule the worship of Hindu gods in public and the observance of Hindu usages were strictly forbidden and rigorously suppressed.

**The Country**

One-third of the entire territory of Goa is stated to be under cultivation. A regular land survey was only recently made. The fertility of the soil varies considerably according to quality, situation and water-supply. The Velhas Conquistas are as a rule better cultivated than the Novas Conquistas. In both these divisions a holding of fifteen or sixteen acres would be considered a good sized farm, and the majority of holdings are of smaller extent. The staple produce of the country is rice, of which there are two good varieties, but the quantity produced is barely sufficient to meet the needs of the population for two-thirds of the year. Next to rice, the culture of cocoanut palms is deemed most important, from the variety of uses to which the products are applied. Hilly places and inferior soils are set apart for the cultivation of cereals and several kinds of fruits and vegetables are cultivated to an important extent. The condition of the agricultural classes in the Velhas Conquistas has improved during recent years, owing to the general rise in the prices of all classes of agricultural produce and partly to the current of emigration to British territory. The people in the Novas Conquistas have long been reported as reduced to great want through the oppression of the landowners. State forests are found in the Novas Con-



quistas They cover an area of 116 square miles and are under conservation and yield some profit to the administration. Iron is found in parts of the territory, but has not been seriously worked. Manganes also exists and was worked to an important extent a few years ago.

### Commerce

In the days of its glory, Goa was the chief entrepot of commerce between East and West and was especially famous for its trade in horses with the Persian Gulf. It lost its commercial importance with the downfall of the Portuguese empire and its trade is now insignificant. Few manufacturing industries of any moment exist, and most manufactured articles in use are imported. Exports chiefly consist of cocanuts, betel nuts, mangoes and other fruits and raw produce. A line of railway connects Mangro with the Madras and Southern Railway. Its length from Mangro to Castle Rock, above the Ghats, where it joins the British system, is 51 miles, of which 49 are in Portuguese territory. The railway is under the management of the Madras and Southern Railway administration, and the bulk of the trade of Mangro port is what it brings down from and takes to the interior. The telegraphs in Goa territory are worked as part of the system of British India, and are maintained jointly by the British and Portuguese Governments. The Goa territory was formerly subject to devastating famines and the people now suffer heart losses in times of drought. There are then supplied, though at great cost, with rice from British territory.

### The Capital

Nova Goa, the present capital of Portuguese India, comprehends Panjim and Ribandar, as well as the old city of Goa, and is six miles in extent. Old Goa is some five miles distant from the new city. Panjim occupies a narrow strip of land leading up to the Cabo, the cape dividing the aquada bay from that of Alameda, and mainly slopes down to the edge of the Aquada. It was selected as the residence of the Portuguese Viceroy in 1759, and in 1843 it was raised to its present rank as the capital of Portuguese India. The appearance of the city, with its row of public buildings and elegant private residences, as seen from the water, is very picturesque and this impression is not belied by a closer inspection of its neat and spacious roads, bordered by decent, tidy houses. The most imposing public structures are the barracks, an immense quadrangular building the eastern wing of which accommodates the Government Press. Other noticeable buildings are the Cathedral and various churches, the viceregal palace, the High Court and so on. The square in the lower part of the town is adorned with a life-sized statue of Albuquerque standing under a canopy.

### History

Goa was captured for the Portuguese by Alfonso de Albuquerque in 1510. Albuquerque promptly fortified the place and established Portuguese rule on a firm basis. From this time Goa rapidly rose in importance and became the metropolis of Portuguese power in the East. There was constant fighting with

the armies of the Bijapur kingdom, but the Portuguese held their own and gained the surrounding territory now known as the Velhas Conquistas. The subsequent history of the town is one of luxury, ostentation and decay. Goa reached its summit of prosperity at the end of the sixteenth century. The accounts of travellers show that the Goa of those days presented a scene of military, ecclesiastical and commercial magnificence which has had no parallel in the British capitals of India. But the Portuguese based their dominion in India on conquest by the sword and they laboured to consolidate it by a proselytizing organization which throws the missionary efforts of every other European power in India into the shade. Old Goa, as the ruins of the old capital are called to day, had a hundred churches, many of them of magnificent proportions, and the Inquisition was a power in the land. The result showed how rotten was this basis and how feebly cemented the superstructure reared upon it. After the genius of Albuquerque and the energies of the early Viceroys had spent themselves, their armies constituted a vast idle population in the capital. The work of conquest was over and it left behind it a gay and wealthy city of conquerors who had nothing to do.

### Modern Times

The Portuguese were unable to hold their own against the native banditti. There was frequently recurring fighting and in 1741 the Marathas invaded the neighbourhood of Goa and threatened the city itself. An army of 12,000 men arrived from Portugal at the critical moment. The invaders were beaten off, and the Nova Conquistas were added to the Portuguese possessions. In 1844 the shelter given by Goa to fugitives from justice in British territory threatened to bring about a rupture with the British Government at Bombay. In 1852 the Ranes of Sarani, the Nova Conquistas revolted. In 1871 the native army in Goa mutinied and the king's own brother came from Lisbon to deal with the trouble and having done so disbanded the native army, which has never been reconstituted. But another outbreak among the troops took place in 1893 and the Ranes joined them the trouble was again not quieted until the arrival of another special expedition from Lisbon. The Ranes again broke out in 1901 and again in 1912, troops being again imported to deal with the last outbreak, which was only reported concluded in the summer of 1913.

### Administration

Goa is regarded as an integral portion of the Portuguese Empire and, with Damam and Diu, forms for administrative purposes one province subject to a Governor General, who is appointed directly by the Lisbon Government and holds office for five years. Besides his civil functions, he is invested with supreme military authority in the province. The Governor-General is aided in his administration by a Council composed of a Chief Secretary, the Archbishop of Goa or, in his absence, the chief ecclesiastical officer exercising his functions, the

DAMAN.

ment, whereby many made it one of their permanent establishments in India. They converted the mosque into a church and have since built eight other places of worship. Of the total population the number of Christians is 1,568. The number of houses is 8,971, according to the same census. The native Christians adopt the European costume, some of the women dressing themselves after the present European fashion, and others following the old style of petticoat and mantle once prevalent in Spain and Portugal. The soil of the settlement is moist and fertile, especially in the pargana of Nagar Havli, tile, especially in the pargana of Nagar Havli, forests, excise and customs duties.

Diu is an island lying off the southern extremity of the Kathiawar Peninsula, from which it is separated by a narrow channel through a considerable swamp. It has a small but excellent harbour, where vessels can safely ride at anchor in two latitudes of water and owing to the great advantages which its position offers for trade with Arabia and the Persian Gulf, the Portuguese were fixed at a commercial prospect. The total population of the island, according to the census of 1900, is 14,614, of whom 343 were Christians.

**FRENCH POSSESSIONS.**

The French possessions in India comprise five Settlements, with certain dependent lodges, or plots. They aggregate 208 square miles, The first French expedition into Indian waters, was attempted in 1603. It was undertaken by private merchants at Rouen, but it failed, as also did several similar attempts which followed. In 1642 Cardinal Richelieu founded the first Compagnie d'Orient, but its efforts met with no success Colbert reconstituted the Company on a larger basis in 1664, granting St Thome, & Portuguese town adjoining Madras over to the Comorandel coast. In 1772 seized by retook Trincomalee, and Caron, passing from the Dutch The Dutch, however, speedily he seized the harbour of Trincomalee in Ceylon and his President, Caron, founded in 1668 the Company, or agency, at Surate But on finding that city unsuitable for a head establishment took up the idea of direct trade with India itself in Madagascar, Colbert's Company again tried unsuccessfully, without success, to establish Indian trade for fifty years After having exemption from taxes and a monopoly of the

which had for twice been in the possession of Holland. It was however, connected with the Governor and his staff at Pondicherry, and those of the local governors of administrators at Chandernaggar, Yanam, Mahe and Karikal, together with other headquarters charges, necessarily engrossed a large proportion of the revenue. All the state and dignity of an independent Government, with four dependent ones, have to be maintained. This is effected by rigid economy, and the prestige of the French Government is worthily maintained in the East. Pondicherry is also the scene of considerable religious pomp and missionary activity. It forms the seat of an Archbishop, with a body of priests for all French India, and of the Missions Etrangères, the successors of the Visitation of Carmelite founded by the Jesuits in 1776. But the chief field of this mission lies outside the French Settlements, a large proportion of its Christians are British subjects and many of the churches are in British territory. The British rupee is the only legal tender within French territories. A line of railway running via Villenour from Pondicherry to Villupuram on the South Indian Railway, maintains communication with Madras and the rest of British India, and Karikal is linked to the same railway by the branch from Peralam. A Chamber of Commerce consisting of fourteen members, nine of them Europeans or persons of European descent, was reorganised by a decree of 7th March, 1914. The capital, Pondicherry, is a very handsome town, and presents, especially from the sea, a striking appearance or French civilisation.

### People and Trade

The Settlements are represented in Parliament at Paris by one senator and one deputy. These are at the present time Mons. E. Flaudin and Mons. P. Blussey, respectively. There were in 1915, 60 primary schools and 3 colleges, all maintained by the Government, with 351 teachers and 9,096 pupils. Local revenue and expenditure (budget of 1915) 2,066,000 francs. The principal crops are paddy, groundnut, and ragi. There are at Pondicherry 5 cotton mills, and at Chandernaggar 1 jute mill, the cotton mills have, in all, 1,692 looms and 73,092 spindles, employing 12,020 persons. There are also at work on oil factories, one ironworks and a coccoline factory. The chief exports from Pondicherry are oil seeds. At the ports of Pondicherry, Karikal, and Mahe in 1914 the imports amounted to 7,543,629 francs, and the exports to 35,303,511 francs. At these three ports in 1914, 292 vessels cleared. Pondicherry is visited by French steamers sailing monthly between Colombo and Calcutta in connection with the Messageries Maritimes. The figures contained in this paragraph are the latest available up to November, 1915, when this chapter was corrected.

### PONDICHERRY.

Pondicherry is the chief of the French Settlements in India and its capital is the headquarters of their Governor. It is situated on the Coromandel Coast, 105 miles from Madras by road and 122 by the Villupuram-Pondicherry branch of the South Indian Railway.

### Administration

The military command and administration-in-chief of the French possessions in India are vested in a Governor, whose residence is at Pondicherry. The office is at present held by Monsiieur A. Martineau. He is assisted by a Secretary General and by several "Chiefs de Service" in the different administrative departments, and by a Chief Judicial Officer. In 1879 local council- and a council-general were established, the members being chosen by a sort of universal suffrage within the French territory. Seventeen municipalities, or Communes, were erected in 1907, namely Pondicherry, Ariancamp, Moul-livapet, Outigret, Villenour, Eiroubourvan, Bhoum and Xittapal, Karikal, Xervy Nedoungadine, Trinoular, Grande Aldee, Cotechery, for the establishment of Karikal, and also Chandernaggar. Mahe and Yanam. On municipal boards natives are entitled to a proportion of the seats. Civil and criminal courts, courts of first instance and a court of appeal compose the judicial machinery. The army and establishments

The ruin of the Company seemed impending when one of its agents, the celebrated Francis Martin, suddenly restored it. Having saved out of the wreck of the settlements at Trincomalee and St. Thomas he took up his abode at Pondicherry, then a small village which he purchased in 1637 from the Raja of Gingee. He built fortifications, and a trade began to spring up, but he was unable to hold the town against the Dutch who wrested it from him in 1673, and held it until it was restored to the French by the Peace of Ryswick. In 1697 Pondicherry became in this year, and has ever since remained, the most important of the French Settlements in India. Its foundation was contemporaneous with that of Calcutta. Like Calcutta, its site was purchased by a European Company from a native prince, and what Job Charnock was to Calcutta Francis Martin proved to Pondicherry. On its restoration to the French by the Peace of Ryswick in 1697, Martin was appointed Governor, and under his able management Pondicherry became an entrepot of trade. Chandernaggar, in Lower Bengal had been acquired by the French Company in 1663, by grant from the Delhi Emperor, Mahe, on the Malabar Coast, was obtained in 1750, under the government of M. Lamoignon, Karikal, on the Coromandel Coast, under that of M. Dumas, in 1739. Yanam, on the coast of the Northern Circars, was taken possession of in 1750, and formally ceded to the French two years later.

but was restored in 1699 It was besieged four times by the English The first siege under Admiral Boscawen in 1748 was unsuccessful The second, under Eyre Coote in 1761, restored it in 1765 It was again besieged and captured in 1778 by Sir Hector Munro, and the fortifications were demolished in 1770 The place was again restored in 1785 under the Treaty of Versailles of 1763 It was captured a fourth time by Colonel Balthazar in 1793, and finally restored in 1816

The Settlement comprises a number of isolated pieces of territory which are cut off from the main part and surrounded by the British District of South Arcot, except where the landing of cargo, and on holidays as a general promenade for the population There is no real harbour at Pondicherry, ships lie at a distance of about a mile from the shore, and communication with them is conducted by the usual *masula* boats of this coast During the ordinary correspondence with the French Collector of South Arcot is empowered to deal with customs and excise The considerable difficulty in questions connected with them on the sea This fact occasions they border on the sea This fact occasions considerable difficulty in questions connected with customs and excise The Collector of South Arcot is empowered to deal with ordinary correspondence with the French authorities on these and kindred matters, and in this capacity is styled the Special Agent At Pondicherry itself is a British Consular

## CHANDERNAGAR.

Chandernagar is situated on the bank of the Hooghly, a short distance below Chinsura Population (1814) 28,016 The town was permanently occupied by the French in 1688, though previously it had been temporarily occupied by them at a date given as 1672 or 1676 It did not, however, rise to any importance till the time of Duplex It changed hands between British and French various times during the Napoleonic wars and was finally restored to the French in 1816 The former grandeur of Chandernagar has disappeared, and at present it is little more than a quiet suburban town with little external trade The railway station on the East Indian Karikal. The country is very fertile, being irrigated by seven branches of the Cauvery, besides many smaller channels The capital of the settlement is situated on the north bank of the river Arasalar, about 14 miles from its mouth It has a brisk trade in rice with Ceylon, and to a less extent with the Straits Settlements It has no commerce with France, and very little with other French colonies The port is merely an open roadstead, provided with a light-house 142 feet high, the light in which has a range of from 8 to 10 miles Indian labourers emigrate from Karikal to the French colonies in large numbers In 1899 Karikal was connected with Perallem on the Tanjore District Board Railway Karikal finally came into French possession on the settlement after 1815

## KARIKAL.

Karikal lies on the Coromandel Coast between the Tanjore District of Madras and the Bay of Bengal The Settlement is divided into three communes, containing 110 villages in all, and covering an area of 63 square miles It is governed by an Administrator subordinate to the Governor at Pondicherry The population has in recent years rapidly decreased In 1883 it was 93,055, in 1891, 70,526, in 1901, 56,595, in 1912, 50,579, and in 1914, 49,764, but the density is still very high, being 1,068 persons per square mile. Each of the three communes—namely, Karikal, La Grande Aldee, and Nedungadu—possesses a mayor and council The members are all elected by universal suffrage but in the municipality of Karikal half the number of seats are reserved for Europeans or their descendants The country is very fertile, being irrigated by seven branches of the Cauvery, besides many smaller channels The capital of the settlement is situated on the north bank of the river Arasalar, about 14 miles from its mouth It has a brisk trade in rice with Ceylon, and to a less extent with the Straits Settlements It has no commerce with France, and very little with other French colonies The port is merely an open roadstead, provided with a light-house 142 feet high, the light in which has a range of from 8 to 10 miles Indian labourers emigrate from Karikal to the French colonies in large numbers In 1899 Karikal was connected with Perallem on the Tanjore District Board Railway Karikal finally came into French possession on the settlement after 1815



is little known, and was for long preserved in fragments, it has however been told with authority and clearness in the 26th number of "The Times." History of the War, to which the reader in search of more detailed information is referred. We propose to summarise that story here, although perhaps it more properly belongs to the detailed frontier sections which follow—

The first visit of the Emperor William to Constantinople in 1889 saw the dawn of a

**Pan-Germanic Scheme** which was known in Berlin as the B B B—Berlin-Baghdad-Bombay. After the war began, a Prokessor, lecturing at Berlin, said that Germany's aims might be summed up in four catchwords—Ocean, Another frontier expression, North Sea, Constantinople, Baghdad, Indian. Reaching from Hamburg to the Persian Gulf but to the Emperor, was a Germanic wedge. The steps towards this goal were very deliberately taken. The first measure was to acquire supreme influence at Constantinople. This was done by a skilfully courted Abdul Hamed, and discreetly maintaining his influence against the rest of Europe. At a time when Abdul Hamed's hands were red with the blood of the Armenians murdered by his Kaiser professed himself his warm friend and steadfastly refused to support any measures to save the lives of the Armenians or to check misgovernment in Macedonia. The reward came in valuable concessions. The Deutsche Bank group, which had acquired control of the railways of European Turkey, extended its influence to Asia Minor. After the second visit of the Kaiser to Constantinople in 1898, there came the Baghdad Railway concession (q v) by which the Sultan granted a concession for the continuation of the Anatolian railways (a German enterprise) to Baghdad and the Persian Gulf to a German syndicate. This

was styled The Imperial Ottoman Baghdad Railway Company, and the concession was signed on behalf of Germany by Herr von Siemens, of the Deutsche Bank. By a further and more definite concession, granted in 1903, to Herr von Gwinner, of the Deutsche Bank, Turkey guaranteed interest on the cost of the line at the rate of £700 per annum per kilometre. This was sufficient to ensure the promoters a handsome profit on the enterprise, regardless of the traffic conditions. There is a good deal of misconstruction with regard to the line which the Germans are building under this concession. All sorts of estimates have been made on the assumption that the line will be suited only for slow trains, and the conclusion has been drawn that the sea route will be able to compete with it for passenger traffic. The fact is that the later sections of the line are being built to a standard which even in the Indian hot weather permits trains to be run at fifty miles an hour.

### Persian Gulf Port

An essential part of this scheme was a port to serve as a terminus for the railway in the Persian Gulf. The steps taken to this end are very characteristic of Teutonic commercial diplomacy. The first German firm to appear

in the Gulf was that of Woonchahus & Co, of Hamburg, which in 1894 began to deal in shells and mother of pearl at Lingah. The next year the German Government established a vice-consulate at Busiire, there were then six German subjects in the Persian Gulf. In 1899, after the signing of the definitive Baghdad Railway concession, this activity in Baghdad was increased. The German cruiser Albatross visited various ports of the Gulf at a party of German "school-fests" appeared at Bandar Abbas. In 1900, after the death of the German Consul General at Constantinople, travel was opened to the Gulf at the head of a mission, which included the German Military Attaché at Constantinople. He visited Sheikh Abdullah of Kuwait and tried to buy a site at it as a terminus, at the head of the Bay as a terminus for the railway. He was refused, for the Sheikh had entered into an agreement with Great Britain not to allow any port of his possessions to be used for the railway. Later a high Turkish official with a menacing letter to the Sheikh, entered the harbour and tried for the same reason. Two other attempts were made, the first was to stir up Ibn Rashid, of Central Arabia, to attack Kuwait, the second to incite Abdullah's nephews to the same end, with the failure of these efforts the direct German attacks on Kuwait came to a conclusion. They once again had recourse to the Turks. They seem to have discovered an alternative terminus for the railway in at Khor Abdullah, north of Koweit, and sent troops down to establish posts there, which remained until the eve of the war.

Meanwhile commercial penetration was active. The firm of Woonchahus was exceedingly active and expanded all over the Gulf, run on lines which could not have been commercially profitable. Various attempts were made to acquire a *quid a parte*, and one almost succeeded. The Sheikh of Sharqah granted a concession to three Arabs to work the trade deposits on the island of Abu Musa and the Arabs transferred it to the Woonchahus firm. The Sheikh protested and with the assistance of the British the intruders were removed, the German Press protested, but the Government confined themselves to a formal caveat. Another German agent sought to obtain an irrigation concession in the Karun. The Hamburg-America Company entered the Gulf trade with a great flourish of trumpets and a display calculated to impress the Arabs. This was the position when three years before the war an agreement between Great Britain, Germany and Turkey which would regularise the agreement between Great Britain, Germany and Turkey was made to arrive at a position beyond Basmah was to be made without the sanction of Great Britain. Turkey agreed to

# Operations in Mesopotamia.

into the interior in the interval of the British conventions with the British army, and a complement of 11,000 men, were understood to be ready for signature when the war broke out.

It is only sixty miles from the two rivers. It is only sixty miles from the two rivers. It is only sixty miles from the two rivers.

## THE EXPEDITION TO BASRA.

At this point it may conveniently be mentioned that the British expedition to Basra was not a purely military operation, but a political one. The British government was determined to show the world that it was not only a military power, but a political one. The expedition was therefore organized on a political basis, and the military aspect was only a means to an end.

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The Garden of Eden—After their retirement from Basra, the British expedition moved on to the Garden of Eden. The Garden of Eden was a large area of land, and the British expedition was determined to occupy it. The expedition was organized on a political basis, and the military aspect was only a means to an end.

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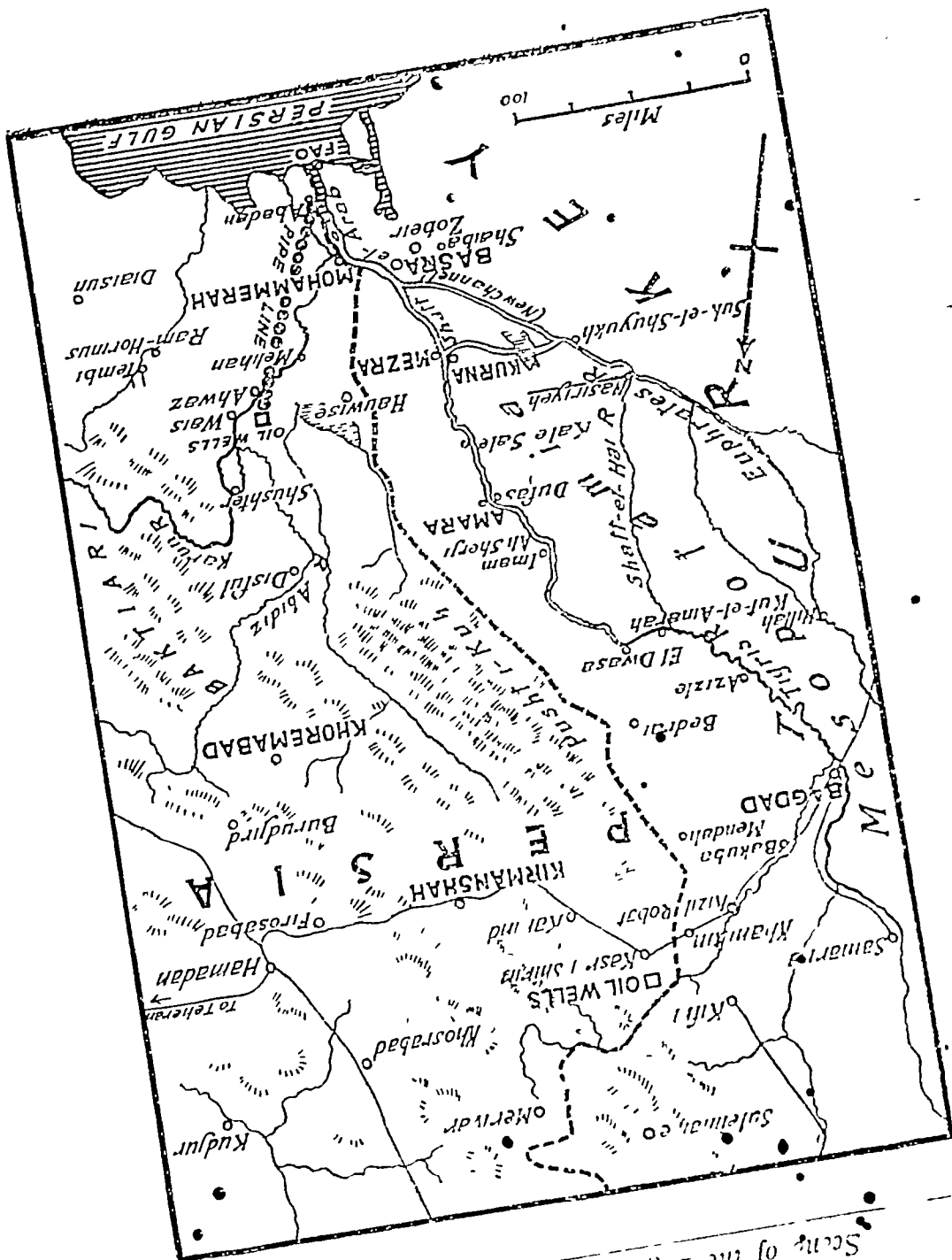
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Scenery of the Tigris in Mesopotamia

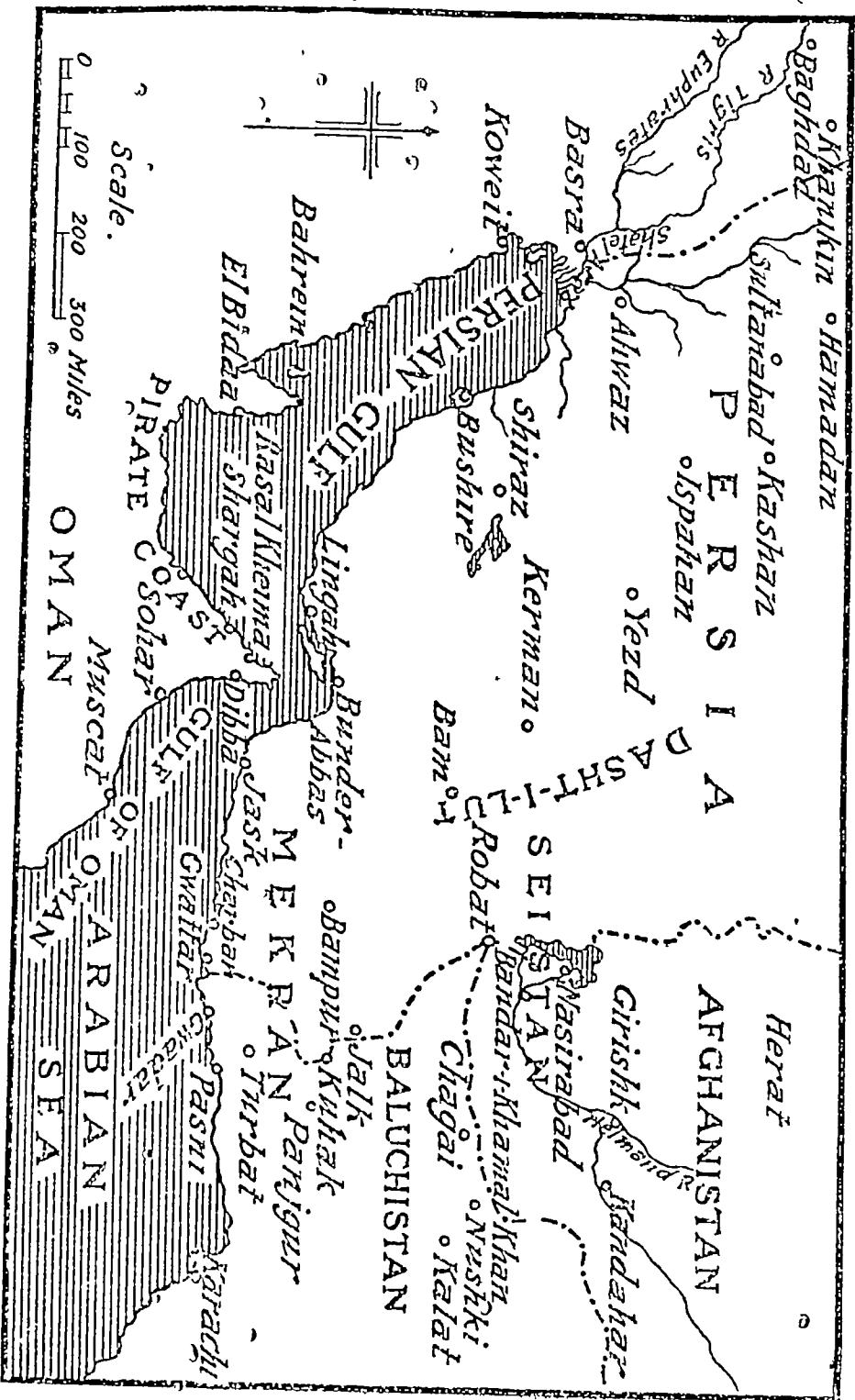
enemies' trenches were well constructed and were held by a mixed force of Turks and Arabs, but the attack did not falter, and so resolutely did the British push on that they not only occupied the trenches, but, crossing the Turkish batteries in flames, they attacked the Turkish Artillery position and captured a complete battery.

The Turks retired up the river and on the next day the British pushed on, reaching Asani on the evening of the 8th. On the 8th it became evident that heavy reinforcements had reached the enemy. General Goringe realised that he must wait until he was in a stronger position to attack, and set work to strengthen his own defenses. The last of the reinforcements reached General Goringe on the 22nd and he made up his mind to attack the enemy on the 24th. It was 6-30 in the evening before they were able to capture the last position at the point of the bayonet, the Turks retiring either to surrender or leave the trenches. That night the naval boats pushed on of opposition as they entered the town. The firing gradually died down, however and by the time the troops were able to march in, all resistance was at an end. All the artillery which the Turks had at Kasrigh, 17 guns including one large howitzer fell into the hands of the British as well as about a thousand prisoners and large stores of rifles and ammunition.

Kut-el-Amara—Any detailed account of the minor operations which led up to the battle on the 27th and 28th (September would fill) many columns, for the British force had left 300 miles away from its base, with lines of communication stretching down the winding uncertain course of the Tigris. The Turks had taken up a position on both banks acrossed the river with the intention of preventing the British forces from reaching Kut-el-Amara. The line of defence lay almost north and south, for here the river flows approximately from West to East. A few miles above the Turkish position the river bears again more to the North. A boat bridge crosses the Tigris three miles below Kut-el-Amara. The defences constructed by the Turks stretched for about six miles on either side of the river. An old dry canal bed branches off at right angles to the right bank of the river, and its artificial banks twenty feet high were the only outstanding features in the whole monotonous landscape. A bridge of boats had been constructed at the place of concentration and this bridge was an important factor in General Townshend's plans for attack. Broadly, this plan was to make a demonstration against the enemy's right, that is on the right bank of the river, to give him the impression that this flank was to be the object of the main attack, and then, by means of the bridge to cross to the left bank of the river with the majority of his force and attack the Turkish left. Dawn on the 27th found the whole of the force in position. An immediate start was made, and in a short time the whole of the line was engaged by the enemy's long range fire. The British troops on the right bank developed heavy artillery and infantry fire, driving in the

[illegible]







on August 1, 1914, the Act had been extended so as to comprise the Court established by the Persian Coast and Islands Order-in-Council, 1907. Thus the Comyns-Gentil for Pers and the coasts and islands of the Persian Gulf will be able to enforce the suppression of the slave trade in the neighbourhood which was agreed to be desirable in a treaty made with the Persian Government so long ago as 1882.

The Sultans have been in a difficult position for a good many years. They hold their capital of Masakat the adjacent town of Abter, one of two other coast towns and certain points in the interior, but as they possess few troops they find themselves unable to control the roving Beduin who wander all over most of the State. When the Beduin win money they were wont to ride down to Abter, the centre of the date trade, and threaten to sack the town. The late Sultan, who died in 1913, was generally compelled to bribe them to go away. The rising which began in 1913 was a more serious affair. A Persian, Sheikh Abdullah seized the inland town of Semal, which stands in a splendid fertile valley where the grown most of the dates for which Masakat is famous. Great Britain has special interests at Masakat, based upon various documents, the chief of which is one dated in 1891-2. The late Sultan asked us to protect him against the Persians. We said we would protect his capital and coast, but could not send an expedition into the interior against the elusive Beduin. We sent Indian troops to Masakat, and they have been there ever since. It is quite probable that the tribesmen were excited by the news of the Great War, and determined to push their own operations more vigorously. The rising culminated in an attack on the outposts of Masakat on the 10th and 11th instant. Detachments of the 35th Infantry and the 102nd Grenadiers had previously been sent to support the Sultan's forces and the attack was driven back the rebels casualties amounting to 500 men. There were no further attacks and the rebels were reported to be greatly disheartened.

*British Consul, Major H. Stewart, O.E., Agency Surgeon Vacant*

## The Pirate Coast.

Turning Cape Musandim and entering the Gulf Proper, we pass the Pirate Coast, controlled by the six Trucial Chiefs. The name of this territory has now ceased to have any meaning, but in the early days it had a very real relation to the actual conditions. The pirates were the boldest of their kind, and they did not hesitate to attack on occasion, and not always without success, the Company's ships of war. Large expeditions were fitted out to break their power, with such success that since 1820 no considerable punitive measures have been necessary. The Trucial Chiefs are bound to Great Britain by a series of engagements, beginning with 1800 and ending with the perpetual treaty of 1853 by which they bound themselves to avoid all hostilities at sea, and the subsequent treaty of 1873 by which they undertook to prohibit altogether the traffic in slaves. The relations of the Trucial Chiefs are controlled by the British Resident at Bushire, who visits the Pirate Coast

## Bahrein.

North of the Pirate Coast lies the little archipelago which forms the chiefship of the Sheikh of Bahrein. Of this group of islands only those of Bahrein and Muharik are of any size, but their importance is out of all proportion to the extent. This is the great centre of the Gulf pearl fishery, which, in a good year, may be worth half a million pounds sterling. The anchorage is wretched, and at certain states of the tide ships have to lie four miles from the shore, which is not even approachable by boats, and passengers, mills and cargo have to be landed in on the donkeys for which Bahrein is famous. But this notwithstanding, the trade of the port is valued at over a million and a quarter sterling, and the customs revenue, which amounts to some eighty thousand pounds, makes the Sheikh the richest ruler in the Gulf. Bahrein has passed through more than usually chequered experiences. Not the least formidable of these are the efforts of the Turks to threaten its independence. These took definite form in the third quarter of the last century, when Midhat Pasha, Vali of Basra, occupied the promontory of El Kater, as well as El Kattif, over against Bahrein, and converted El Hasa into a district. The war with Russia put an end to these designs, but they were revived and the Turks at El Kater are still a menace to Bahrein, but negotiations for their withdrawal are pending. The Sheikh by the treaty of 1861, entered into special engagements with the British Government, by whom his rights are guaranteed. In the neighbourhood of Bahrein is the vast buying ground which has hitherto baffled archaeologists. The generally accepted theory is that they are relics of the Phoenicians, who are known to have traded in these waters. In the north-west corner of the Gulf lies the

## Koweit.

*Political Agent, Major T. H. Keyes*

one possible Gulf terminus of the Baghdad-Koweit line solely in the fact that it is the

of similar size in the world. The importance of Koweit lies more in the fact that it is the



*Political Resident and II M Consul-General for Turkish Arabia (Baghdad), vacant Residence Surgeon and Assistant to the British Consul, Mr F. L. Crow*

**The Persian Shore.**

The Persian shore presents lower points of the Persian Gulf, and it is a railway passes over the notorious boats which preclude the idea of rail connection, and it is a railway to the central tableland is opened the corner of Bushire will dwindle to insignificance. Further south lies Lingah, reputed to be the prettiest port on the Persian coast, but its trade is being diverted to Jeban on the Persian Coast in the narrow channel which forms the entrance to the Gulf from the Arabian Sea is Bander Abbas. Here we are at the Bay of the Gulf. Bander Abbas is of some importance as the outlet for the trade of Kerman and Yazd. It is of still more importance as a possible naval base. To the west of the town between the Island of Kishm and the mainland, lie the Charsene Straits which narrow until they are less than three miles in width, and yet contain abundance of water. Here, according to sound naval opinion, there is the possibility of creating a naval base which would command the Gulf. The great obstacle is the climate, which is one of the worst in the world. On the opposite shore, under the shadow of Cape Musandam, lies another sheltered deep-water anchorage, Liphunstone's Inlet, where the climate conditions are equally vile. But between these two points there is the possibility of controlling the Gulf just as Gibraltar controls the Mediterranean. For many years Bander Abbas loomed large in public discussions as the possible warm water port for which Russia was seeking. Now it has reappeared in connection with the Trans-Persian railway. It is understood that the British Admiralty insist on that line meeting the sea at Bander Abbas, where it would enter the British zone, and whence, along the Coast of Mekran, it would be commanded from the sea. The Russian concessions wish the line to strike the sea much further east either at the actual British frontier, Gwattur, or at Chahabar, where there are believed to be the makings of a deep-water port. So far the project has not passed beyond the stage of academic discussion (q v).

**The Admiralty Oil Contract**

A further complexity was introduced into the position in Southern Persia, and incidentally into Gulf politics when the British Government on behalf of the British Admiralty, entered into partnership with the Anglo-Persian Oil Company for the development of their oil

British Government temporarily occupied and the possible port of Chahabar. The coast, there is the cable station of Jask, On the Mekran (q v) the stage of academic discussion beyond port. So far the project has not passed beyond the makings of a deep-water port. Gwattur, or at Chahabar, where there are believed to be the makings of a deep-water port. So far the project has not passed beyond the stage of academic discussion (q v).

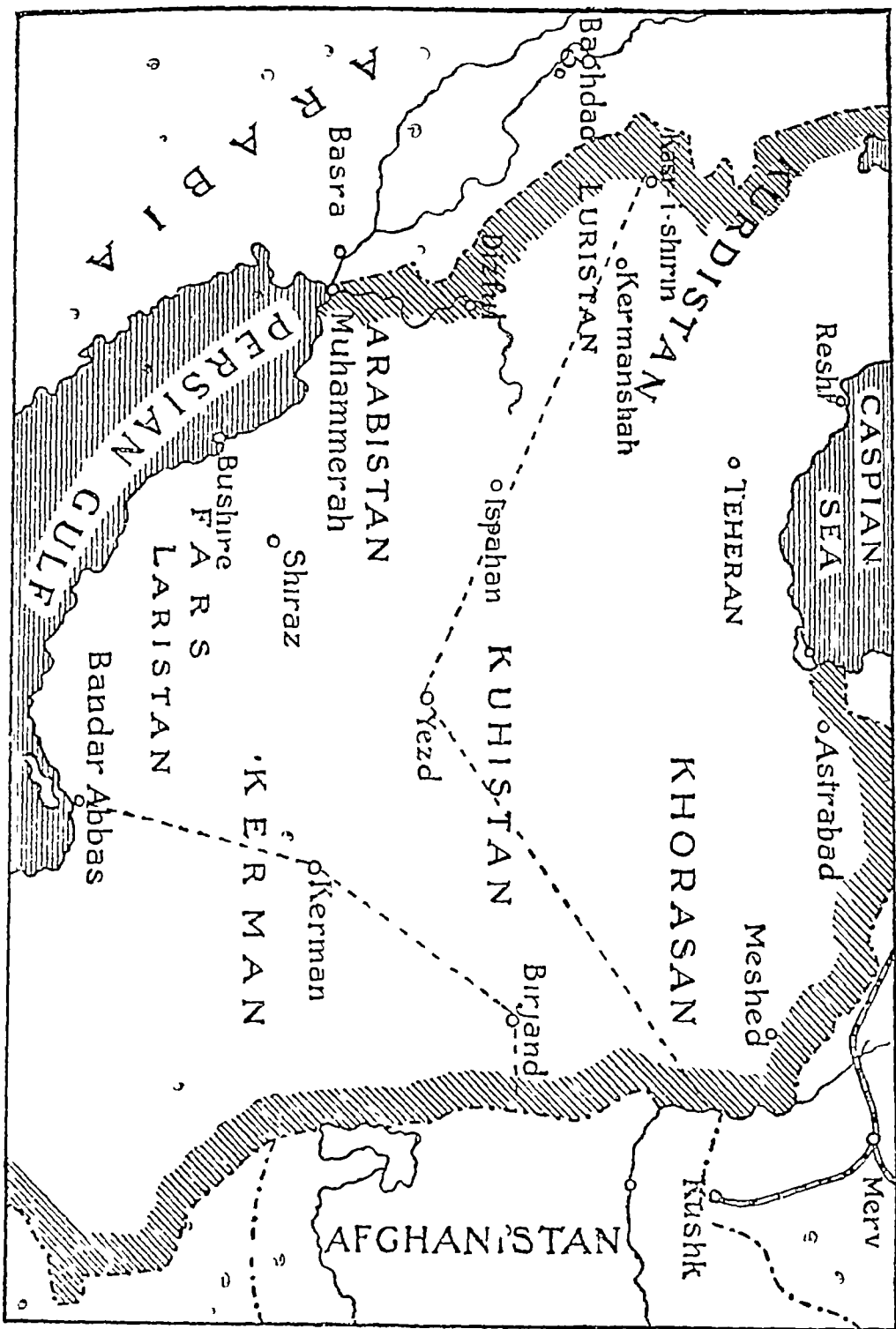
*Fields in the neighbourhood of Maidan-i-Naphthun*

**The Concession.**—The concession which the company was sought in 1909 to work was originally obtained in 1901 from the Persian Government by Mr W. K. D'Arcy. It granted the exclusive right for 60 years "to drill for, produce, pipe, and carry away oil and petroleum products throughout the Persian Empire except in the provinces of Azerbaijan (Gilin), Mazandaran, Asyrabad, and Khorrassan." The area covered is about 500,000 square miles. In 1903 a first exploration company was formed as a preliminary with a capital of £600,000, of which £514,000 has been issued, £20,000 in shares in this company was allotted to the Persian Government, as well as £20,000 in cash, in return for the concession. When the Anglo-Persian Company was started in 1909 the actual holding of this Exploration Company was limited to one square mile in the Maidan-i-Naphthun field situated in territory belonging to the Bahari Khans. Under the terms of a separate agreement the latter received 3 per cent of the shares in any company formed to work oil in their country, and a second subsidiary company was then created, known as the Bahari Oil Company, with a capital of £400,000, in order to cover the area within their territory outside the square mile allotted to the first Exploration Company. In the first Exploration Company the Anglo-Persian Company owns £388,000, or 97 per cent. The Persian Government is paid a royalty of 16 per cent on the net yearly profits. The fact that both the Government and the Bahari tribes are interested in the prosperity of the company is regarded as an important factor in securing its position in a country otherwise rather untruly.

**The Fields.**—Oil has so far been found in quantity at Maidan-i-Naphthun, at depths of 1,200 ft to 1,300 ft, in hard porous limestone, and has been proved at Kaser-i-Shitn, sulfate indications of petroleum, which are very highly thought of, have also been observed at White Oil Springs, Kishm, Dalki, Ahmad, Rudan and other places. The present production of the company is obtained entirely from the Maidan-i-Naphthun area, where 30 wells have been drilled, it lies 140 miles N. E. of Shatt-al-Arab and Karun rivers. The oil is conveyed 150 miles by pipeline to the refinery at Abadan, while materials have to be transported to the field by river and across a difficult country by mules. The workings are entirely under the charge of British subjects, the skilled labour is mainly recruited from India, and the unskilled labourers are largely Persians, no difficulty having been experienced in securing an adequate supply. The Bahari Khans with the Sheikh of Alubamgan have been made "police" the field works and upper sections of the pipe-line, and an agreement has been made with the Sheikh of Alubamgan for the protection of the refinery and the lower section. **The Contract.**—Under the agreement the Government are to subscribe for £2,000,000 in ordinary shares of the company, £1,000 in









## Anglo-Russian Agreement

Whether with this purpose or not, Russian intrigue was particularly active in Selsan in the early years of the century. Having Russian agents moved into Selsan, and through the agency of the Belgian Customs officials, "scientific missions," and an international plague cordon, sought to establish influence, and to stifle the British trade which was gradually being built up by way of Nushli. These efforts died down before the presence of the Alcholan mission, which, in pursuance of Treaty rights, was demarcating the boundary between Persia and Afghanistan, with special reference to the distribution of the waters of the Helmand. They finally ceased with the conclusion of the Anglo-Russian Agreement. Since then the international importance of Selsan has waned. Whether on account of the Agreement, which bars the line of advance through Selsan, or because of the discovery of an easier route, we cannot determine, but Russian activities in railway construction have been diverted to the Trans-Persian route, which would take a direct line through Lebanon from Baku, and meet the Arabian Sea at Bunder Abbas or Chahbar.

The natural conditions which give to Selsan this strategic importance persist. Meanwhile the Selsan trade route. The distance from Qazvin to the Selsan border at Killa Rohat is 465 miles, most of it dead level, and it has now been provided with fortified posts, dak bungalows, wells, and all facilities for caravan traffic. The railway has been pushed out from Spsand, on the Bolan Railway to Nushli, so as to provide a better starting point for the caravans than Qazvin. The value of the trade carried over this route last year was Rs 19 lakhs.

## Text of the Agreement

This Agreement, which aimed at an amicable settlement of all questions likely to disturb the friendly relations of the two countries in Asia generally, and in Persia, Afghanistan and Tibet in particular, was signed on August 31st, 1907, and officially communicated to the Powers in St Petersburg on September 24. After reciting the desire of both Governments to maintain the integrity of Persia, and to allow all nations equal facilities for trade in that country, the Convention states that in certain parts, owing to their geographical proximity to their own territories, Great Britain and Russia have special interests. Accordingly (Art I) To the north of a line drawn from Kasr-i-Shirin, Istan, Zed and Khabk to the junction of the Persian, Russian and Afghanistan frontiers, Great Britain agrees not to seek for itself or its own subjects or those of any other country any political or commercial concessions, such as railway, banking, telegraph, roads, transport or insurance, or to oppose the acquisition of such concessions by the Russian Government or its subjects. II Russia gives a similar undertaking concerning the region to the south of a line extending from the Afghan frontier to Gazik, Brijand, Kerman and Bander Abbas. III Russia and Great Britain agree not to oppose, without previous agreement, the granting of concessions to subjects of either country in the regions situated between the lines above-

## Chaos in Persia

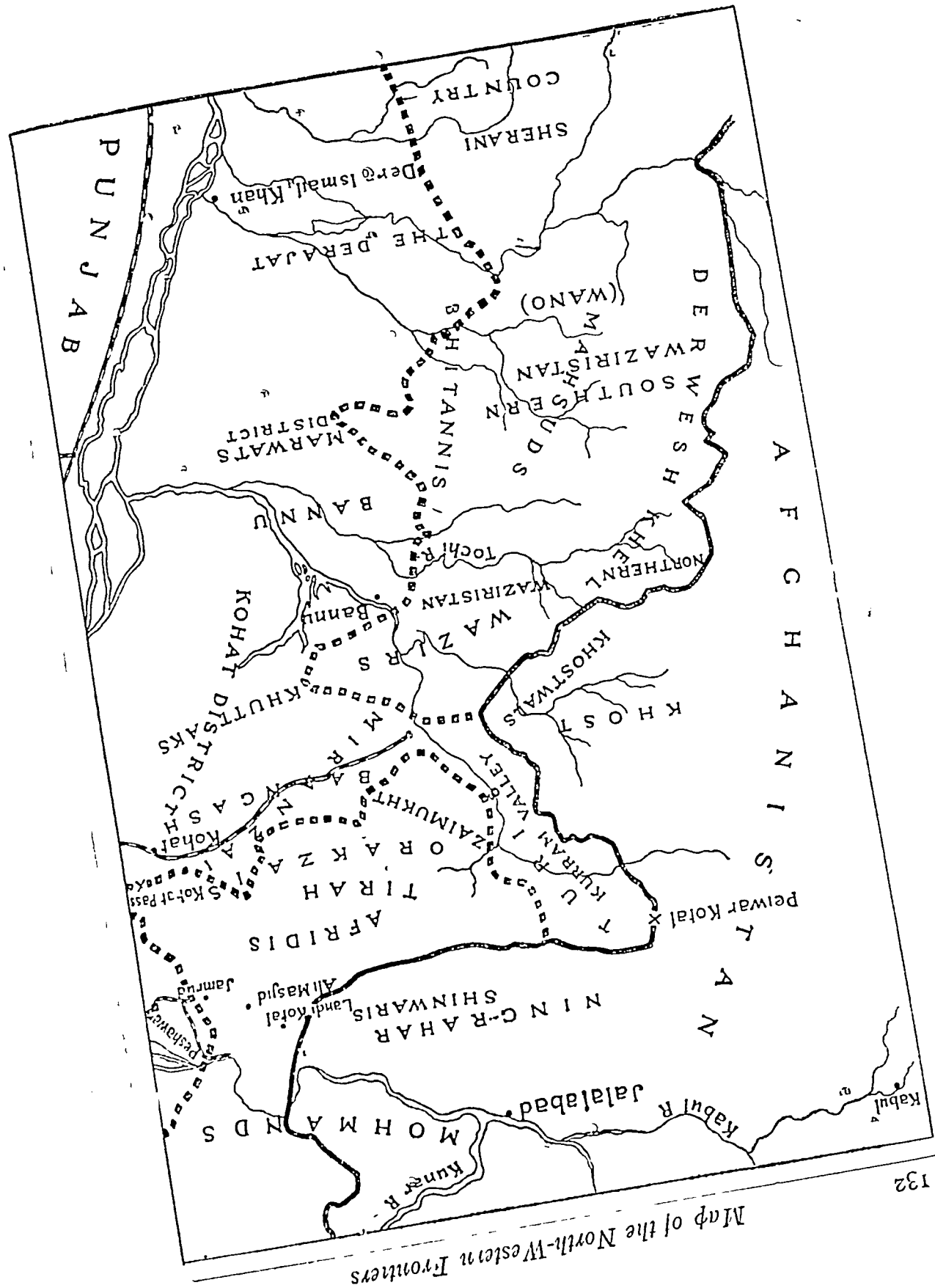
So far from improving the domestic situation in Persia, the Convention provided a condition of thinly disguised anarchy. There was little security for life or property outside the zone commanded by the Russian troops in the North, and in 1913, the Central India Horse, a solitary Indian Regiment sent to Shiraz, was with it a dismal picture of Persian disorder was drawn in the Persian Blue Book published in July, 1913. Lord Curzon, summarising it in a debate in the House of Lords on July 28 said—"The picture delineated in this Blue-book of Southern Persia is a picture of a country in the throes of dissolution, given up to rapine and brigandage, where trade is at a standstill, where armed bands rove about the country doing as they please, where British officers are dead or robbed, and in one particular unfortunate case an officer was killed, a country where the central Government is impotent and local government ignored."

mentioned All existing concessions in the regions above designated are maintained. IV "The arrangements by which certain Persian revenues were pledged for the payment of the loans contracted by the Shah's Government with the Persian Bank of Commerce and the signing of the Convention are maintained. V In the event of any irregularities in the redemption or service of these loans Russia may institute a control over the revenues situated within the zone designated by Article I and Great Britain may do the same in the zone designated by Article II. But before instituting such a control the two Governments agree to a friendly exchange of ideas with a view to determining its nature, and avoiding any action in contravention of the principles of the Convention.

With the Convention a letter was published from Sir E. Grey to the British Ambassador at St Petersburg announcing that the Persian Gulf lay outside its scope, but that the Russian Government had stated during the negotiations that it did not deny the special interests of Great Britain in the Gulf, and it was intimated that Great Britain reasserted them.

"In Northern Persia—and I must discriminate between Northern and Southern Persia—the conditions are very different. I do not say there is no insecurity, but life and property are relatively safe in Northern Persia, and this is owing to the presence of an overwhelming force of Russian troops in that part of the country." Lord Alorley thus indicated the Government's policy. I will put that common policy in seven propositions—(1) maintaining the spirit and the letter of the Anglo-Russian Convention, (2) maintaining the independence of Persia and avoidance of partition and an approach to partition, economical, administrative, geographical, political, (3) while faithful to the stability of our present alliance undertaking concerning the region to the south of a line extending from the Afghan frontier to Gazik, Brijand, Kerman and Bander Abbas. III Russia and Great Britain agree not to oppose, without previous agreement, the granting of concessions to subjects of either country in the regions situated between the lines above-











of 1879 was for the first time—the new melancholy of the British army in the north. It was because the British army was not at Kabul, and the British army was not at Kabul, and the British army was not at Kabul.

### Relations with India

Between the advanced posts on either side of the British policy has been to make it strong and friendly. In the first particular it has been to make it strong and friendly. In the first particular it has been to make it strong and friendly.

### Gates to India

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A great deal of the British army in the north. It was because the British army was not at Kabul, and the British army was not at Kabul, and the British army was not at Kabul.

### Position To day

It used to be one of the commonplaces of Indian discussion that the system which Abdurrahman Khan had set up would perish with him, because none other was capable of maintaining it. Abdurrahman Khan died in 1880, and his favourite son, Habibullah, who had been gradually initiated into the administration, peacefully succeeded him, and has since peace-

been carried to Jampur, at the entrance to the Khyber Pass. A first class military road, sometimes double, sometimes single, the roads and then descends until it meets the Afghan frontier at our advanced post at Landi Kotal, the Pass to our advanced post at Landi Kotal, sometimes double, sometimes single, the roads and then descends until it meets the Afghan frontier at our advanced post at Landi Kotal.

## Anglo-Russian Agreement

Inasmuch as Afghan politics, in their relation to Great Britain, were determined by the Russian measures, they have recorded with the conclusion of the Anglo-Russian Agreement the part of the Anglo-Russian Convention relating to Afghanistan is as follows: "The British Government disclaims any intention of changing the political position in Afghanistan, and undertakes neither to take measures in Afghanistan, nor to encourage Afghanism, nor to take measures, either directly or indirectly, to the disadvantage of the Russian sphere of influence, and agrees to act in all political relations with Afghanistan through the British Government, and it also undertakes to send no agents to Afghanistan. It Great Britain adheres to the provisions of the treaty of Kabul of March 21, 1805, and undertakes not to annex, or to occupy, territory to the said treaty, any part of Afghanistan, or to intervene in the internal administration. The reservation is made that the Amir shall fulfil the engagements contracted by him in the aforementioned treaty. III Russian and Afghan officials, especially appointed for that purpose on the frontier, or in the frontier provinces, may enter into direct relations in order to settle local questions of a non-political character. IV Russia and Great Britain declare that they recognize the principle of equality of treatment for commerce and trade that all facilities acquired already or in the future for British and Anglo-Indian commerce and merchants shall be equally applied to Russian Commerce and merchants. V These arrangements are not to come into force until Great Britain has notified to Russia the Amir's assent to them. The Amir has never given his adhesion to the Agreement, but Great Britain and Russia have agreed to regard the Agreement as if the Amir had accepted it. On the outbreak of the war His Majesty the Amir declared his complete neutrality, and this policy was pursued during the year with complete and unswerving faithfulness.

## TIBET.

Recent British policy in Tibet is really another phase in the long-drawn-out duel between Great Britain and Russia in Central Asia. The earliest efforts to establish communication with that country were not, of course, inspired by this apprehension. When in 1774 Warren Hastings despatched Bogle on a mission to the Tashi-Lama of Shigatse,—the spiritual equal, it not superior, of the Dalai Lama of Lhasa—his desire was to establish facilities for trade, to open up friendly relations with a Power which was giving us trouble on the frontier, and gradually to pave the way to a good understanding between the two countries. After Warren Hastings' departure from India the subject slept, and the last Englishman to visit Lhasa, until the Xongshuband Expedition of 1904, was the unofficial Manning. In 1885, under the inspiration of Colonel Macartney, the Bengal Civil Service, a further attempt was made to get into touch with the Tibetans, but it was abandoned in deference to the opposition of the Chinese, whose suzerainty over Tibet was recognized, and to whose views until the war with Japan, British statesmen were inclined to pay excessive deference. But the position on the Tibetan frontier continued to be most unsatisfactory. The Tibetans were aggressive and obstructive, and with a view to putting an end to an intolerable situation, a Convention was negotiated between Great Britain and China in 1890. This laid down the boundary between Sikkim and Tibet, it admitted a British protectorate over Sikkim, and paved the way for arrangements for the conduct of trade across the Sikkim-Tibet frontier. These supplementary arrangements provided for the opening of a trade mart at Yatung, on the Tibetan side of the frontier, to which British subjects should have the right of free access, and where there should be no restrictions on trade. The agreement proved useless in practice, because the Tibetans refused to recognize it, and despite the establishment of suzerainty, the Chinese Government was unable to secure respect for it.

fully retained his seat on the throne. He concluded in 1905 the Dane Treaty, by which he accepted the same obligations on the same terms as his father. He visited India in 1907, and apparently both enjoyed and profited by his experiences. Since then the purdah which screens Afghanistan has been lifted so little that there is no definite knowledge of what has passed behind it. It would however be impossible to describe the attitude of the Amir as friendly. It is said that the honours bestowed upon him in India, especially the conferring of a Royal Title, increased the discontentment with which all Afghans suffer. It bitterly resented the conclusion of the Anglo-Russian Agreement, without any prior reference to himself, and has never given his adhesion to it over. His attitude toward the frontier disturbances of 1907-08 was peculiar. There is no doubt that the Zafra Kheil rising was stirred by refugees in Kabul. Thousands of Afghans, equipped in Afghan territory, participated in the Mohmand campaign. The great lashkar which attacked Landi Kotal was entirely composed of Afghans. The most favourable interpretation placed on his conduct is that during his absence in India, followed by a long tour in the northern provinces, the situation in Afghanistan had got out of hand, and the Amir let it take its course until a rupture occurred, when he stepped in and assumed control of affairs. For the rest, the position of the ruler of Afghanistan is not an enviable one. His brother, Nasrullah Khan, a noted Anglophobe and reactionary, is the Commander-in-Chief of the Army, and the head of the orthodox party. The administration of the country is extremely lax. Deterrence in Khosht indicates that the strength of the central power has been exaggerated. In 1912, the Mangas of Khosht revolted against an unpopular governor and besieged him in his own stronghold. There was much talk of the prompt and severe punishment of the rebels, but the troops never reached the valley and the rebels were bought off by the dismissal of the unpopular governor.

## Russian Intervention.

This was the position when in 1899 Lord Curzon, Viceroy of India, endeavoured to get into direct touch with the Tibetan authorities. Three letters which he addressed to the Dalai Lama were returned unopened, at a time when the Dalai Lama was in direct intercourse with the Tsar of Russia. His emissary was a Siberian Dorjé, who had established a remarkable ascendancy in the councils of the Dalai Lama. After a few years' residence at Lhasa Dorjé went to Russia on a confidential mission in 1899. At the end of 1900 he returned to Russia at the head of a Tibetan mission of which the head was officially described in Russia as "the senior Yeanke Khondab". The senior Yeanke Khondab was attached to the Dalai Lama of Tibet. This mission arrived at Odessa in October 1900, and was received in audience by the Tsar at Livadia. Dorjé returned to Lhasa to report progress, and in 1901 was at St Petersburg with a Tibetan mission, where as bearers of an autograph letter from the Dalai Lama they were received by the Tsar at Peterhoff. They were escorted home through Central Asia by a Russian force to which several intelligence officers were attached. At the time it was rumoured that Dorjé had, on behalf of the Dalai Lama, concluded a treaty with Russia, which virtually placed Tibet under the protectorate of Russia. This rumour was afterwards officially contradicted by the Russian Government.

## The Expedition of 1904

In view of these conditions the Government of India, treating the idea of Chinese suzerainty over Tibet as a constitutional action, proposed in 1903 to despatch a mission, with an armed escort, to Lhasa to discuss the outstanding questions with the Tibetan authorities on the spot. To this the Home Government could not assent, but agreed, in conjunction with the Chinese Government, to a joint meeting at Lhasa, on the Tibetan side, of the frontier Sir Francis Younghusband and the British representative, but after months of delay it was ascertained that the Tibetans had no intention of committing themselves. It was therefore agreed that the mission, with a strong escort, should move to Gyantse. On the way the Tibetans developed marked hostility, and there was fighting at Yuma and several sharp encounters in and around Gyantse. It was therefore decided that the mission should advance to Lhasa, and on August 3rd, 1904, Lhasa was reached. There Sir Francis Younghusband negotiated a convention by which the Tibetans agreed to respect the Chinese Convention of 1890, to open trade marts at Gyantse, Garkot and Yatung, to pay an indemnity of £500,000 (seventy-five lakhs of rupees), the British to remain in occupation of the Chumbi Valley until this indemnity was paid off at the rate of a lakh of rupees a year. In a separate instrument the Tibetans agreed that the British Trade Agent at Gyantse should have the right to proceed to Lhasa to discuss commercial questions. If necessary

## Home Government interferences

For reasons which were not apparent at the time but which have since been made clearer, the Home Government were unable to accept

Article II—In accordance with the admitted principle of the suzerainty of China over Tibet, Great Britain and Russia engage not to enter into negotiations with Tibet, except through the intermediary of the Chinese Government. This engagement does not exclude the direct relations between the British Commercial Agents and the Tibetan authorities, provided for in Article V of the Convention between Great Britain and Tibet of the 27th April 1904, and confirmed by the Convention between Great Britain and China of the 27th April 1906, nor does it imply that Great Britain entered into by Great Britain and China in Article I of the said Convention of 1906. It is clearly understood that British subjects of Great Britain or of Russia may, in matters with the Dalai Lama, and the representatives of British and Chinese Governments of Great Britain and China, engage as far as the said Convention allows those relations to last. Article III—The British and Russian Governments of the present arrangement.

Article IV—The two High Contracting Parties engage neither to seek nor to obtain, whether for themselves or for their subjects, any concessions for railways, roads, telegraphs, and mines, or other rights in Tibet

Article V.—The two Governments agree that no part of the revenues of Tibet, whether in kind or in cash, shall be pledged or assigned to Great Britain or Russia or to any of their subjects.

Annexed to the Agreement was a re-affirmation of the declaration for the evacuation of the Chumby Valley after the payment of three annual instalments of the indemnity, provided that the trade marts had been effectively opened for three years and that the Tibetans had complied in all respects with the terms of the Treaty.

## Chinese Action

The sequel to the Anglo-Russian Agreement was dramatic, although it ought not to have

On the approach of the Dalai Lama, the Youngshusband mission to Uryu, the sacred city of the Buddhists in Mongolia. He left the internal government of Tibet in confusion, and one of Sir Francis Younghusband's great difficulties was to find Tibetan officials who would undertake the responsibility of signing the Treaty. Now the responsibility of China over Tibet had been explicitly reaffirmed. It was asserted that she would be held responsible for the foreign relations of Tibet in the past this suzerainty having been a "constitutional action." It was inevitable that China should take steps to see

[illegible]

## Later Stages

The British Government, acting on the representations of the Government of India, made strong protests to China against this action. They pointed out that Great Britain,

## Political Importance of Tibet

The political importance of Tibet in relation to India has of necessity been changed by the Anglo-Russian Agreement so long as that instrument is in force. The question has been admirably summed up by Sir Valentine Chirol ("The Middle Eastern Question"), written before the Agreement "was reached. 'What it would be impossible to view without some concern' " he wrote " would be the assurance of a foreign and possibly hostile power."

the internal administration (or desire) to interfere with the disclaiming any (desire) to interfere with the internal administration of Tibet, could not be indifferent to disturbances in the peace of a country which was a neighbour, on intimate terms with other neighbouring States on our frontier, especially with Nepal, and pressed that an effective Tibetan Government be maintained. The attitude of the Chinese Government was that no more troops had been sent to Tibet than were necessary for the preservation of order, that China had no intention of conquering Tibet into a province, but that being responsible for the good conduct of Tibet, we were respected by the Tibetans. Finally, the Chinese remarked that the Dalai Lama was such an impossible person that they had been compelled again to depose him. Here the matter might have rested, but for the revolution in China. That revolution broke out in Szechuen, and one of the first victims was Chao Erh-feng. Cut off from all support from China, surrounded by a hostile and infuriated population, the Chinese troops in Tibet were in a hopeless case, they surrendered, and sought to escape not through China, but through India, by way of Darjeeling and Calcutta. The Dalai Lama returned to Lhasa, and in 1913, the House of Lords on July 28, Lord Alington stated the policy of the British Government in relation to these changes. He said the declaration of the President of the Chinese Republic saying that Tibet came within the sphere of Chinese internal administration, and that Tibet was to be regarded as an unequal footing with other provinces of China, was met by a very vigorous protest from the British Government. The Chinese Government subsequently accepted the principle that China is to have no right of active intervention in the internal administration of Tibet, and agreed to the constitution of a conference to discuss the relation of the three countries. This Convention met at Simla when Sir Henry McMahon, Foreign Secretary to the Government of India, Mr. Ivan Chen, representing China, and Mr. Long Chen Shatra, Prime Minister to the Dalai Lama, thrashed out these issues. Whilst no official pronouncement has been made on the subject, it is understood that a Convention was initiated in June which recognised the complete autonomy of Tibet proper, with the right of China to maintain a Resident at Lhasa with a suitable guard. A seem autonomous zone was to be constituted in Eastern Tibet, in which the Chinese position was to be relatively much stronger. But this Convention, it is understood, has not been ratified by the Chinese Government, owing to the difficulty of defining Outer and Inner Tibet.



Sawbwas or hereditary chiefs, subject to the guidance of Superintendents and Assistant Superintendents. The Northern Shan Rail-way to Lashio, opened in 1903, was meant to link with China, but this idea has been put aside, for it is seen that there can never be a trade which would justify the heavy ex-pen-sure. The Southern Shan States are being developed by railway connection. The Karenni States lie on the frontier south of the Shan States South of Karenni the frontier runs between Siam and the Transserrim Division of Burma. The relations between the Indian Government and the progressive kingdom of Siam are excellent.

### \* PERSIAN DEBT TO BRITAIN.

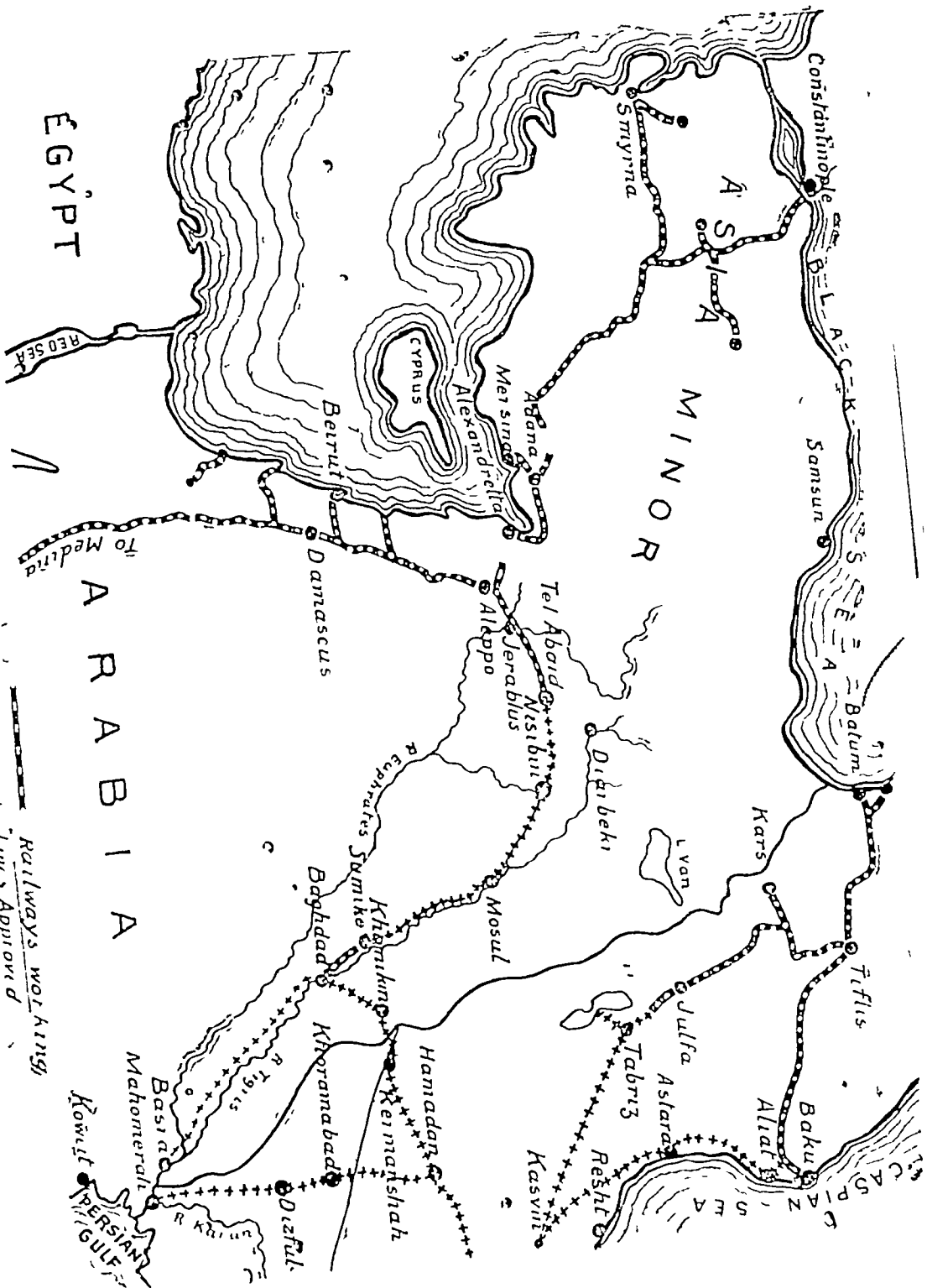
A Parliamentary Paper sets out the outstanding debt of the Persian Government to the British and Indian Governments, as follows			
£ s d			
Portion of Anglo-Indian Loan of 1903-4 (repayable by March, 1928)			
Anglo-Indian advance of February, 1912	314,281	15	1
Anglo-Indian advance of August, 1912, after defeat of Gendarmerie in Fars	100,000	0	0
Anglo-Indian advance of November 1912, for use of Governor-General of Fars	25,000	0	0
Anglo-Indian advance of Nov 1912, for use of Governor-General of Fars	15,000	0	0
The 1903-5 loan bears interest at 5 per cent, and all other advances bear interest at 7 per cent			
Total			
£754,281	16	1	1
Anglo-Indian advance of May, 1913, for general purposes of administration, including £30,000 for such purposes in Fars and £10,000 for the British Custom House			
200,000	0	0	0
Anglo-Indian advance of May, 1913, for gendarmerie purposes in Fars			
100,000	0	0	0

\* By agreement with Great Britain and Russia these loans have been placed under a moratorium, in order to assist the Persian Government financially

the Turkish railway, with a Turkish loan guarantee, were highly favourable to the company. Thus, the out-of-pocket cost of construction of the first section, which has already been paid, is estimated to have been £250,000, and the company retained a profit of at least £1 million sterling on this part of their enterprise. In the second section and construction is being unconcealed and construction is more difficult and more costly. The railway must for a long time be carried through the Turkish finance. The country through which it passes from the Mediterranean sea-board to the Taurus valley is not so rich in resources, and the prospects of commercial advancement, and the financial consequences to work for increasing earnings. Thus, the Baghdad railway company neglects the working of the line to the Anatolian railway company at a rate of £148 per kilometre, as against £180 per kilometre guaranteed by the Turkish Government. The weight of the Turkish obligations in connection with the railway had an important effect upon the discussions, in Paris in the summer of 1913, of the international committee for the examination of questions relating to the Ottoman Empire. The committee was appointed in reference to the financial settlement between Turkey and the Balkan States after the war and it became evident that for some Powers, whatever the deserts of the Balkan Allies might be, the Baghdad railway and Turkey's ability to carry the guarantee upon it were the one fixed point to be guarded in the Ottoman Empire. Important negotiations took place between Germany and France, in 1913, to regulate their respective financial positions in regard to the railway, so as to avoid future conflict of policy.

The German group holding the Arabian Baghdad Highway from Kona, then its southern terminus, through northern concolon for extending that system in 1902, a railway, connection was granted, in 1902, a northern concolon for extending that system from Kona, then its southern terminus, through the famous range to the extreme eastern Shid-Idrian seaboard, and by way of Shid-Idrian and Baghdad to Bagdad. This concession was substituted for a line projected by a more northerly route through the pass of Djabber North, strongly objected to that route, on the ground that it would bring the line into the

The actual position in regard to these various undertakings up to the outbreak of the European war and, so far as is to be ascertained, their status, is as follows —





Atkaya was handed over for traffic on June 1, 1911 and it was reported last summer that it was completed and open for traffic a distance of 100 miles had been finished by the Government from a total of 1,020 miles. But the work was not finished in March, 1911, and that the British war had ended the Turkish intercepts more than ever upon the Atkaya railway. For this and the German Government over the Balkan railway interests to an extent in the group on favorable conditions and the Government were reported to have been willing toward to Baghdad during the war.

An agreement was reached in 1911 between British and Turkey with the requirement of

that it should be no differential rates for the railway and in regard to the latter

British obtained the right of appointing two directors of the railway not for parties or

control but to control British interests. Britain

recognition of the independence of the British of the railway and the continuance, uniformity of the railway.

The Anglo-Turkish Agreement has not yet been published but Sir Edward Grey announced in 1911 that

we are in connection by Turkey of the status quo in the Persian Gulf, the status quo as we

have in the Persian Gulf for years past. (House of Commons, June 29, 1911)

The Anglo-Turkish Agreement regarding the Baghdad

in London by Sir Edward Grey and Prince

complete understanding has been reached on all questions at issue. The agreement

will not come into force until after the conclusion of the negotiations with Turkey, as on

some material points the ascent of the Porte will be necessary. The contents of the Agreement, therefore not be divulged at present.

The war has altered the whole situation Germany also proposed to build a line from

Baghdad to Khankin where a pass through the mountains leads into the West Persian

Highlands Russia had agreed to build a railway from Khankin, via Kermanshah and

Hamadan to Teheran, construction to begin within two years of the completion of the

extension from Baghdad to Khankin and then to be completed in 4 years

## Trans-Persian Line

A Trans-Persian line to join the Russian Caucasus system with the Indian Railways

baggage taken up-truck from Basra to Baghdad by special barges and tugs. The line from Baghdad to Basra was carried on the latter

Construction was meant to be carried on the

baggage taken up-truck from Basra to Baghdad

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baggage taken up-truck from Basra to Baghdad

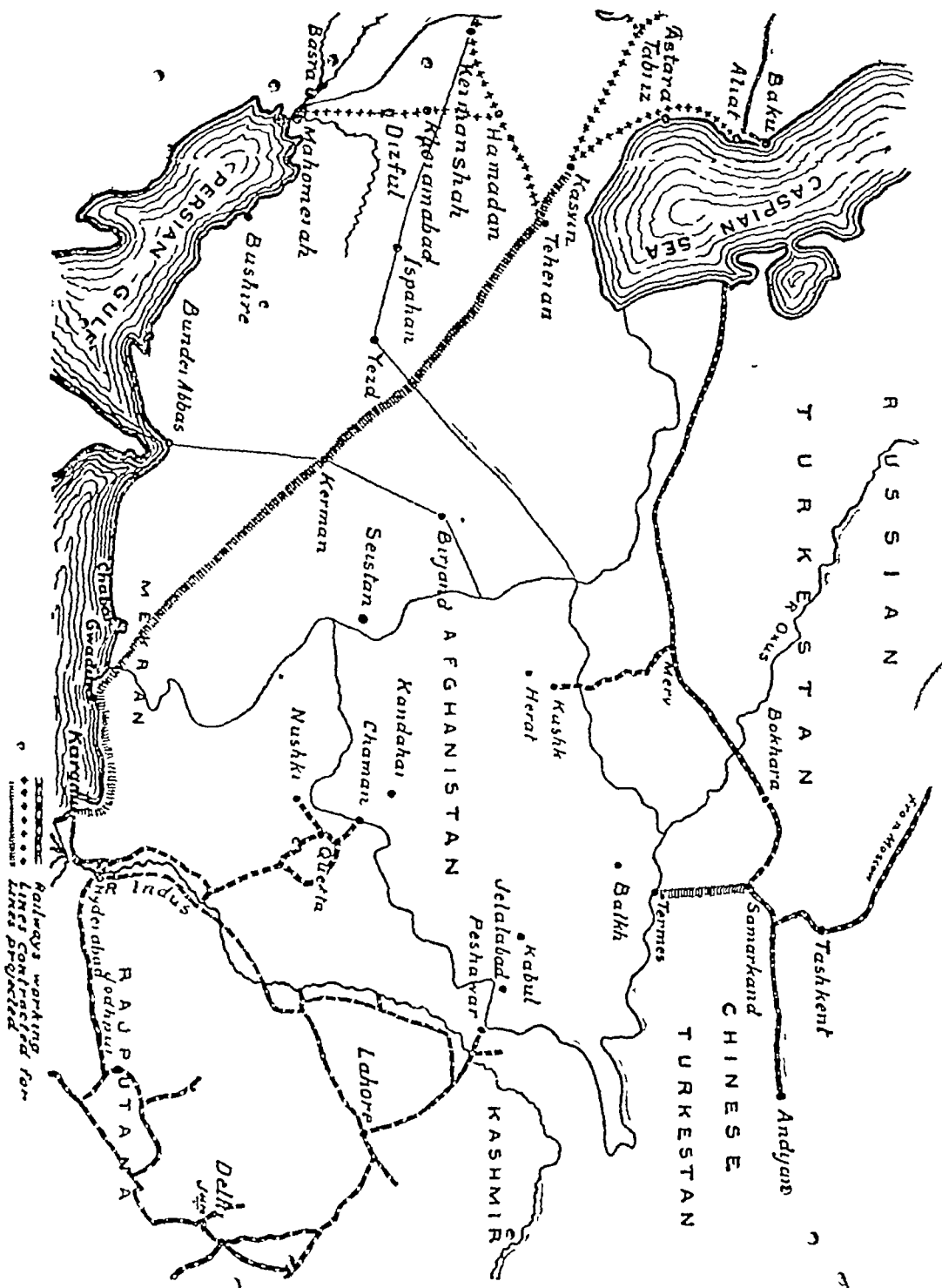
Construction was meant to be carried on the

baggage taken up-truck from Basra to Baghdad

Construction was meant to be carried on the

baggage taken up-truck from Basra to Baghdad

Map of the Trans-Persian Railway.



at assumed proportions of practical importance in the line of 1911. Both the Indian and the Afghan railways are fully developed up to the points which would be the limit of a trans-Asian line, and the following considerations up to the period of the war in general carry us up to the period of the war. The Russian railway system in the Black Sea, to Baku on the west coast of the Caspian. Incidentally, article 59 of the Treaty of Berlin provides that Britain shall be a free port essentially commercial. The Persian Foreign Minister on February 6, 1913, signed a concession to the Russian-Julia-Tabriz and Enzeli-Isfahan Road Companies, giving the right to construct a railway from Julia to Tabriz (93 miles) with an extension to Lake Urmia and a preferential right to build a railway from Tabriz to Kazvin, Julia and Tiflis were at that time equipped with a motor omnibus service, on which a motor omnibus service was maintained. The road is the property of the concessionary company, so that sections of it could conveniently be utilized for railway construction, the work of construction the line being thus expedited. The railway was to be begun within two years of the granting of the concession and completed within six years and a time limit of eight years is fixed for the extension of the line from Tabriz to Kazvin, a further distance of 250 miles. The concession runs for a period of seventy-five years. Option is reserved to the Persian Government to purchase the Julia-Tabriz line after a lapse of 35 years. Early in 1914, it was announced in Tiflis that the line had been built from Julia to Dardaz, some 13 miles south of Julia and news from Russia indicated that it would be completed to Tabriz in the spring of 1915. The Russian Government Department of Railways in June 1913, approved a concession to a Russian Syndicate for the construction of the line from a point on the railway close to Baku to Astrakhan, where the Russian and Persian territories meet. More than one possible starting point for the trans-Persian Railway is therefore in course of preparation.

On the Indian side, the railway system is fully developed up to Baluchistan, close to the Persian frontier a broad gauge line running through Quetta to Nushki was constructed with the intention of its development for the benefit of trade which already runs by caravan along the "Nushki trade route" to the Persian province of Seistan. The Russian Government favoured linking up the trans-Persian railway with the Indian railways at this point. But the suspicious saw a strategic reason for this preference. The Indian Government found itself unable to approve the connection. They insist that the line shall run either from Yazd or Kerman to the sea-board. This condition is absolute. There remains, then, a connection with the Indian North-Western Railway at or near Karachi.

The necessary financial arrangements for the preliminary work in connection with the proposal, which came from Russia, to connect the railways with Russia and India were completed in January, 1912. It was then stated that the Russian Committee were already in possession of a nearly complete survey of more than 300 miles from Astrakhan to Gwadar and the length of the line from there to Gwadar on the Perso-Baluch Frontier is some 1,200 miles. Such, after this announcement, Mr. Johns was appointed by the Government of India to survey a railway route between Karachi and Gwadar, and found a good line with a general gradient of 1 in 250, the steepest being 1 in 90. Twelve of the principal Russian Banks were interested in the project and the desired amount of English and French capital was guaranteed, one English banking house having even offered to furnish the whole of the English quota. The French concerns are the Banque de Paris et des Pays Bas, the Credit Lyonnais, the Societe Generale, the Comptoir National, the Banque de l'Union Parisienne and Count d'Arman.

Meetings of the international financiers concerned in the scheme were held and a So-called Etudes was formed. M. G. Kander, formerly a distinguished member of the French diplomatic service, was selected as President, with Sir William Garstin as British Vice-President and M. Homblot, ex-President of the Russian Duma, as Russian Vice-President. The Society consists of a council of administrators of 24 persons. The Governments of all three countries gave their approval to the enterprise and on the firm representations of the British Foreign Office a formal memorandum was drawn up providing for absolute equality of British, Russian and French control in the undertaking. It was agreed that in the northern half Russian interest should be 60 per cent, French interest 33 1/3 per cent and British 6 2/3 per cent, and in the southern half Russian interest 6 2/3 per cent, French 33 1/3 per cent, and British 6 2/3 per cent. The total interests of the parties in the whole line would thus be equal. The French and Russian proposal was that interests should be equal for the whole line. The above arrangement was made to meet British susceptibilities. No announcement has yet been made of the settlement of further details in regard to the line. Its general route will presumably be from Astrakhan via Tiflis to Kerman or Yazd, and thence to either Bunder Abbas, at the entrance of the Persian Gulf, or Chahar, a point on the Mexican Coast, about 100 miles west of Gwadar. As to the cost, £18,700,000 was the amount first declared by Russian experts as sufficient to cover the cost of construction and provision of rolling-stock for the 1,400 miles of railway in Persian territory. English experts then believed that £13,000,000 would be sufficient. Further investigation has led competent experts on the English side to say that the capital involved must eventually total £30,000,000 at least. The line presents no great engineering difficulties, but there would be a great variety of gradients throughout its length, the line will rise at several points to some thousands of feet above sea-level, and numerous detours will be necessary both for gradients and to serve local needs.

Central Asian Lines

There remains the possibility of linking up the Russian and Indian railway systems by



Port	Appointment	Name
Calcutta	Vice Consul	Mr. C. W. Rhodes
		Austria Hungary
		The American Consuls are in charge of Austro Hungarian interests during the War
		Belgium
Bombay	Consul	Mr. Robert Chaddon
Calcutta	Do	Mr. J. H. Fife
Karachi	Do	Mr. E. Murray
Aden	Do	Mr. G. R. Walker
Madras	Do	Mr. W. Macdonald
Rangoon	Do	Mr. A. Scott
Akyab	Do	Mr. J. Lince
Calcutta	Vice-Consul	Mr. R. W. Watson (In charge)
Do		Bolivia
Calcutta	Consul General	Kumar Shyama Kumar Tagore
		Brazil
Calcutta	Consul	Mr. Joakim D. S. Nahapit
Do	Do	Mr. T. A. D'Souza
Bombay	Vice-Consul	Dr. Edward F. Underwood, M. A., M. D., Ph. D., J. P.
Rangoon	Commercial Agent	Mr. J. B. Halliday
Do		Mr. J. F. Brown
		Chile
Calcutta	Consul-General	J. G. Bendien (Acting)
Bombay	Vice Consul	Mr. R. Menzies
Calcutta	Do	Senior L. Grommers
Chittagong	Do	Mr. A. R. Lelshman
Rangoon	Do	Mr. C. Kautfeld
		China
Rangoon	Consul	Mr. Hsiao Yung Hsi
		Costa Rica
Calcutta	Consul	Kumar Shyama Kumar Tagore
Bombay	Honorary Consul	Mr. John Zuberhuler (Acting) on leave
Do	Do	Mr. Blasio Paez (In charge)
Calcutta	Do	Vacant
		Denmark
Calcutta	Consul General	Mr. C. J. Dixon
Bombay	Do	Mr. A. F. Sells
Aden	Do	Mr. E. S. Murray
Madras	Do	Mr. R. T. Menzies
Rangoon	Do	Mr. I. F. Jenson
Karachi	Vice-Consul	Mr. L. B. Stevens
Calcutta	Do	Mr. S. G. L. Rustace
Moulmein	Do	Mr. P. T. Christensen

Name	Appointment	Port.
<b>Ecuador</b>		
Kumar Shyama Kumar Tagore	Consul	Calcutta
<b>France</b>		
M. Dejean de la Batie	Consul-General	Calcutta
M. E. Nicaul	Chanceller	Do
M. C. Barret	Consul	Bombay
M. H. Martin	Vice-Consul	Do
M. M. Ries	Consular Agent	Aden
M. R. E. L. Worke	Do	Karachi
M. R. E. L. Worke	Do	Madras
Vacant	Do	Chittagong
Do	Do	Kangoon
Do	Do	Myab
Do	Do	Cocnada
Do	Do	Tellicheerry
Do	Do	Do
<b>Germany</b>		
The American Consuls are in charge of German interests during the War		
<b>Greece</b>		
Mr. E. Apostolides	Consul	Calcutta
<b>Gautemala.</b>		
Mr. H. J. Sanders	Consul	Calcutta
<b>Italy</b>		
Marquis F. Medici di Marignano	Consul General	Calcutta
Car. G. Cecchi	Do	Aden
Car. Dr. G. Gorno	Consul	Bombay
Mr. J. Merkle	Do	Rangoon
Vacant	Vice-Consul	Calcutta
Signor Alfredo Manzato	Do	Bombay
Mr. Gordon Fraser	Consular Agent	Calcutta
Vacant	Do	Madras
Vacant	Do	Moulmein
Mr. H. J. Guy, R. N. R.	Do	Akyab
Signor Aldo Viola	Do	Bassein
<b>Japan.</b>		
Mr. Kametaro Tiyima Shoroku	Consul-General	Calcutta
Mr. Y. Shibata	Do	Do
Mr. Yasukichi Yatabe	Consul	Bombay
<b>Liberia</b>		
Dr. Benode Behari Banerjee	Consul	Calcutta
Dr. C. H. Freeman Underwood, M.D.	Do	Bombay
<b>Mexico.</b>		
Mr. R. L. B. Gall	Consul	Calcutta

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# The Army in India.

terially took service under the East India Company. By degrees Royal Regiments were sent to India, the first being the 38th Foot,

## Struggle with the French

From this time for a century or more the Army of India was engaged in constant war. After a prolonged struggle with the French, whom Duplex had by 1750 raised to the position of the leading power in India, the efforts of Stringer Lawrence, Clive and Byro Coote completed the downfall of their rivals, and the power of England was established by the battle of Plassey in Bengal and on the field of Wandewash in southern India. In 1761 the final overthrow of the French was completed, and the territories of that enterprising people were reduced to a few settlements on the coast, the principal of which, Pondicherry, was captured in 1763. But while the Army of India had accomplished this much, they had now to contend with the great native powers, both Hindu and Mahomedan. A number of independent states had arisen on the decline of the Mughal Empire, and succeeded to and extended the conquests of Shahi, while in Mysore Hyder Ali, a Musalman adventurer, had established himself in the place of the Hindu Raja. A great and prolonged struggle took place with the ruler of Mysore, in which the forces of the Crown and the Company's Army bore a distinguished part. This struggle extended over nearly twenty years, and terminated only with the death of Hyder's son and successor Tipu when his capital of Seringapatam was taken by assault in 1799.

## Presidency Armies

The extension of British territory had necessitated a corresponding augmentation in the strength of the armies of Bengal, Madras and Bombay, which were entirely separate organisations, as rendered requisite by the great distances and independent territories by which they were separated. But Bengal and Bombay troops had taken part in the wars in Southern India, although the bulk of the fighting had fallen on the Madras Army. These armies had grown both in strength and efficiency. In 1787 the Governor-General, Lord Cornwallis, wrote to the Duke of York—"A brigade of our sepoy forces would make anybody emperor of Hindustan. The appearance of the native troops gave me the greatest satisfaction, some of the battalions were perfectly well-trained, and there was a spirit of emulation among the officers, and an attention in the men, which leaves me but little room to doubt that they will soon be brought to a great pitch of discipline."

## Reorganisation of 1796

In 1796, when the native armies were reorganised, the European troops were about 13,000 strong, the native troops numbered some 57,000, the infantry being generally formed into regiments of two battalions each. In Bengal native infantry regiments were formed by linking existing battalions. The establishment of each two-battalion regiment was 1 colonel, commandant, 2 lieutenant-colonels, 2 majors, 8 captains,

The first sepoy army of India originated in the small fighting units of raiders, known as *komis*, employed for the protection of the frontier of the East India Company, but sepoys were recruited and employed by the French, who appeared in India in 1605. Before this, detachments of soldiers were sent from England to Bombay and as early as 1623 the first India Company at Armagon, near Masulipatam, was acquired in 1610, but in 1651 the fort on Fort St. George consisted of only 13 men. In 1661 Bombay was occupied by 100 soldiers. Four years before the French appeared in India in 1665 the garrison of Pondicherry consisted of 255 men, of whom only 9 were English, the remainder being French, Portuguese and native.

While the origin of the regular sepoy army is usually dated from 1748, when Stringer Lawrence, the father of the Indian Army, first introduced an Indian force in Madras, it is interesting to note that there was a considerable military establishment in Bombay prior to this date. In 1712 this establishment, which was considered as one regiment, consisted of a captain, nine lieutenants, eight ensigns, a current two warrant major, 82 sergeants, 52 corporals, 26 drummers, and 310 Europeans, 10,311 natives, there was in addition a kind of native militia composed of 700 sepoys including native officers. These were maintained at a monthly cost of 312 rupees. They were not equipped or dressed in a uniform manner, but supplied their own weapons—swords and shields, bows and arrows, pikes, lances or matchlocks. After the declaration of war with France in 1744, the forces at Bombay were considerably increased, and an artillery company was raised already in 1740 the French at Pondicherry had raised a large force of Musalman soldiers, armed and equipped in the European fashion, and the fall of Madras, which the French captured in 1746, induced the English East India Company to begin the formation of a military establishment. In January 1748 Major Stanger Lawrence landed at Fort St. David to command the forces of the Company. The English foothold in India was then precarious. The French under Duplex were contemplating further attacks, and it became necessary for the English Company to form a larger military establishment. The new commandant at once set about the organisation and discipline of his small force. The garrison was organised in seven companies, and the peons, or factory guards, were also formed into companies. This was the beginning of the regular Indian Army, of which Lawrence eventually became Commander-in-Chief in Madras the European companies developed into the 1st Madras Fusiliers, similar companies in Bombay and Bengal became the 1st Bombay and 1st Bengal Fusiliers. The native infantry was similarly developed and organised by Lawrence and Clive, who was his contemporary, and military adventurers—both Musalman and Hindu—

22 lieutenants, 10 ensigns, 2 European non-commissioned officers, 40 native officers, 200 native non-commissioned officers, 40 drummers and 500 sepoy. Each battalion had two grenadier and eight battalion companies. Promotion and further rules for the officers were promulgated and interior economy was improved. At the same time the Madras and Bombay armies were reorganised. The Madras cavalry was formed into four regiments, having twelve British officers each, the artillery into two battalions of five companies each and fifteen companies of lascars. The native infantry was organised in eleven two-battalion regiments, rather stronger than those of the Bengal establishment. There were also two battalions of European infantry. The Bombay Army was organised on similar lines, with an establishment of six two-battalion regiments and a Marine Battalion, six companies of European artillery were formed in 1708.

### Policy of Wellesley

Besides the wars that have been referred to, the East India Company had been engaged in minor operations, particularly against the growing power of the Marhattas, which menaced the stability of the British in India. In 1798 the Marquis Wellesley arrived as Governor-General firmly imbued with the necessity of reducing the power of the French, which had again arisen through the military adventures of various native powers. There was a French party at Serampore, and the ruler of Mysore was in correspondence with Napoleon Bonaparte in Egypt. At Hyderabad the French adventurer Raymond dominated the State army, having under his command a disciplined force of 14,000 men who carried the colours of the French Republic and wore the Cap of Liberty engraved upon their buttons. In the Marhatta States, and especially in Sindia's French General. One of the first acts of the new Governor-General was to disarm the French party at Hyderabad, a measure carried out by Captain (afterwards Sir John) Alcock. The French officers in the Mizar service were deported to their own country, and a treaty of alliance was concluded under the terms of which a Contingent of Hyderabad Troops was supplied for service in the campaign of Serampore. Troops of all three presidencies took part in the campaign which terminated with the capture of Serampore and was in this campaign that Colonel Arthur Wellesley, afterwards Duke of Wellington, came into prominent notice. It was now necessary to direct attention to affairs in the Marhatta States, which were encroaching on the territories of our ally the Mizar, and had a dangerous ascendancy throughout India. An opportunity occurred in supporting the Peshwa, who had been expelled from Poona by Holkar.

The Marhattas, originally mere predatory hordes, had become an organised nation under the rule of Sivaji. After his death

### Mutiny at Vellore

The Indian Army has been from time to time subject to incidents of mutiny which were precursors of the great mutinies of 1857. In the fort of Vellore in 1806 were confined the sons of Tipu Sultan, these descendants of the most fanatical enemy of the English in India being permitted to maintain a large body of adherents and an almost regal state. Naturally they intrigued. The native soldiers of the Company had grudge against the British authorities and issued a new pattern of turbans, which owing to its resemblance to the head-dress worn by half-caste drummers, gave rise to a rumour that their conversion to Christianity was intended. Other inconsistencies of orders, prejudicial to the religion and sentiments of both Hindus and Mohammedans, caused the smouldering discontent already existing to break out into open

the Government which he had inaugurated passed from the feeble hands of his successors, the Rajs of Sikim, into those of the ascetic Brahmin Alibek, the Peshwa, who had their seat at Poona. Other Marhatta princes, descended from officers of State—Sindia, Holkar, the Gakwar and the Raja of Berar—had swayed over a great part of India, and were attempting to extend their dominions and consolidate their influence from the Ganges to the Godavari. The Marhattas, famous as irregular predatory hordes in times gone by, had never been remarkable for courage, the place of which was supplied by their natural astuteness and capacity for organisation. The genius of the nation lay more in the direction of diplomacy and intrigue, and a false glamour appears to surround their name as warriors, to which history has lent an undeserved prestige. Their success must in part be ascribed to their intellectual acumen and subtlety, and in part to the effect combination of those with whom they had to contend. The eclipse of their nationality was built on the ashes of the declining Mughal Empire. But even since the days when their military renown had rested on some solid foundation they had rapidly declined, and the phenomenon of their name was displaced the moment they came into collision with European armies. Their artillery and infantry, composed of Jats, Rajputs, Arabs and other mercenaries, fought with desperate valour, but the far famed Marhatta horse disappeared from the field at the beginning of every action. General Lake in the north of India defeated the forces of Sindia in a succession of battles at Aligarh, at Agra, at Delhi and Laswar, while in the south General Arthur Wellesley gained complete victories over the combined forces of Sindia and the Raja of Berar at Assaye and Argaum. In these campaigns a considerable British force and a large portion of the Bengal and Madras armies were employed, they acquitted themselves with their customary valour, and gained some of the most notable victories recorded in English history. During the progress of these wars the Army of India was considerably augmented, and we find that on reduction to peace establishment in 1805 there were some 25,000 British and 130,000 native troops in India.



with barbaric pagantry at Peshawar, but the British army had lost the prestige of invincibility which it had gained during a hundred years of victory throughout peninsula India. It is convenient here to give some account of the Sikhs whom our army met a more formidable enemy than they had hitherto encountered, who have since supplied many of the best soldiers in its ranks, and who less than nine years later served with valour and ability beneath our colours in the great struggle of the sepoy war. In the early part of the sixteenth century Baba Nanak, a peasant of a village near Lahore, founded the religious sect which was to play such an important part in the history of India. The religion he preached was pure monotheism and in no way tainted in its original form. The new faith, founded on the Unity of God and the religious equality of man, gradually made great headway, the philanthropy and tolerance of its founder appealing to the hearts of men. The Gurus who succeeded Nanak were active in their teaching, they founded and built the Golden Temple at Amritsar, and the sect began to assume a political significance. This brought them into conflict with the Mughal Government, and Sikhism was subjected to that persecution which was alone necessary to transform it into a militant political force. Har Govind, the Sixth Guru, became a martyr as well as a spiritual leader, and on his death in 1645 left the Sikhs a strong and militant power.

After two hundred years the Sikh faith became established as a guiding principle to his little society of worshippers from Hindu idolatry and Mahomedan faith, Amar Das preserved the community from declining into a sect of associates, Arjan gave his increasing followers a written rule of conduct and a civil organisation. Har Govind added the use of arms and a military system, Govind Singh bestowed upon them a distinct political existence, and inspired them with the desire of being socially free and naturally independent. Sikhism arose where fallen and corrupt Brahminical doctrines were most strongly acted on by the vital and spreading Mahomedan belief. As in the case of other sects whose views and spreadings are recorded in the history of the world, religious persecution gave to Sikhism a very stimulus to permanence and progress. With varying fortunes the power of the Sikhs was consolidated, and by 1785 they were predominant from the frontiers of Oudh to the Indus. Their prestige is illustrated in the story of the traveller Foster, who describes the alarm caused to a petty Chief and his people by the appearance of two Sikh horsemen under the walls of their fort. The great Chief Ranjit Singh, the "Lion of the Punjab," established his ascendancy throughout that province, and with the aid of European military adventurers such as Ventura and Alhard organised a powerful regular army. Ranjit Singh had the wisdom to keep on friendly terms with the English, but his death was the signal for internal dissensions which in course of time rendered the Army the principal power in the state, and brought them into conflict with the English neighbours.

Sikh Wars

A large portion of the Bengal Army under Sir Hugh Gough took part in the first Sikh War in 1819, in the opening battle of which, at Attock and Ferozshahr, the native troops did not greatly distinguish themselves, although they retrieved their reputation in subsequent actions when the Sikhs were defeated at Aliwal and Sobram. But the Bengal Army had for some time been undergoing that deterioration of discipline which culminated a dozen years later in the mutiny. They were no longer the soldiers of Luck and Laswara, the heroes of Laswara, of Serinagar, and of expeditions overseas in the snows and deserts of Afghanistan and amid the bloody scenes of the Khurd Kabul Pass and Jagdalah. They had lost much of their ardour and prestige, while they had witnessed the defeat and slaughter of their hitherto invincible English comrades. They fought well on occasion, stimulated by the presence and example of English regiments, but their training and discipline fell much to be desired. The second Sikh War followed a few years later, when, after the bloody battle of Chillianwala, the Sikhs were finally vanquished at Gujrat. The other campaigns belonging to this period were the conquest of Sind by Sir Charles Napier and the Second Burmese War. On the eve of the Mutiny there were in the Bengal Army 21,000 British and 137,000 native troops, in the Madras Army 8,000 British and 49,000 native troops, and in Bombay 9,000 British and 45,000 native troops. The conquest of the Punjab extended our frontier to the country inhabited by those turbulent tribes which have given so much trouble by their raids and forays, while they have supplied many soldiers to our army. To keep order on this north-western limit of the Empire the Punjab Frontier Force was established, and was constantly engaged in small expeditions which, while they generally involved but little bloodshed, and involved much arduous work in the pursuit of an elusive enemy.

The Indian Mutiny

The history of the Indian Army in general and of the Bengal Army in particular is so closely bound up with the great Mutiny of 1857 that it is necessary to enter into some account of the causes which brought about that catastrophe, and to sketch in outline its chief events. In 1856 Lord Dalhousie resigned the Viceroyalty of India after a term of office marked by strenuous activity and by an extensive policy of annexation. From Oudh a dissolute and incompetent king was removed and his territories were annexed to the British dominions, an act which could not but have a disturbing effect in a country where the natural and hereditary ruler of the people were regarded with the greatest veneration. The territory of Oudh was also annexed, the Government refusing to allow the Rani to adopt an heir to succeed her deceased husband, and the Rana of Bikaner, adopted son of the last Peshwa of Bikaner, was refused a compensation of his adoption. These two latter, the Rani of Oudh and the Rana of Bikaner, became bitter and most cruel enemies. The







part of a hundred years Under the old chaotic system the mobilisation scheme provided for the despatch of two armies, one through the Khyber, the other by way of Quetta to Kandahar from the North-West alone, whence the conquering hordes of all the invaders whose march is recorded in history had poured from subject to menace from without

But under the system then existent the measures arranged for defence provided for a force of only four Divisions of all arms This force was not only inadequate in numbers but in capacity for expansion Its distribution and organisation were more suited for holding internal India than to contend with an external foe The troops were distributed in Districts under generals whose commands were geographical in designation and in area and Brigades ready to take the field In case of war the troops for the field army were to be drawn from all parts of India, the various units being sorted out into Brigades and Divisions on arrival at the base of operations, and provided with a scratch lot of generals and staff officers for the occasion

### Army Re-distributed

It was in the reorganisation of the scattered and heterogeneous forces of the Indian Empire that Lord Kitchener's great work lay Some steps had already been taken towards the abolition of those Presidency distinctions which formerly divided the Indian native forces into three armies supplemented by a number of local forces But he found three armies, each confined to its own geographical limits, beyond which its units and its personnel did not ordinarily proceed, or when they did, they carried the chains which linked them to their respective Presidencies The units of the Indian Army were renumbered, a fruitful cause of confusion being thus eliminated, Presidency and local distinctions were abolished, and a homogeneous army, though composed of heterogeneous races, free to benefit by the experience of service in any part of India, was created The experience of 1857 proved the measure of safety provided by the presidential system of three armies with nothing in common between them, but the new regime considered that the conditions of fifty years ago were obsolete, and had been entirely changed by increased facilities and rapidity of communication throughout the Empire

The whole army was formed into nine Divisions, exclusive of the Burma Division, each with its proper complement of the three arms, under its General with staff complete These Divisions were organised for war, each one could take the field intact, leaving behind sufficient troops for the maintenance of internal order Arrangements were made for the organisation of supply and transport The reserve was not sufficiently large to supply the waste of war, it was expanded, the infantry reserves being augmented, while the cavalry was included in the system Small and isolated stations were by degrees abandoned, the Divisions, or at least the Brigades, being assembled with a due regard to strategic requirements and to the necessities of training, though some are extended over a

wide area of country The nine divisions were distributed between two armies, each with its Commander (their heads resting on the main routes of Quetta and Peshawar

The Military Supply Department, with its Member on the Governor General's Council, was abolished in due course, an Army Department was created, to deal with much of the business carried on by its predecessor, with a Secretary in Charge The Commander-in-Chief is now the only Military Member of Council, and it is a question whether he has not a burden greater than one man can bear The recommendations of Lord Roberts' Committee have been ignored, for that Committee recorded the opinion that "the concentration of the whole responsibility of supply of the Army under one head, if that head is to be the Commander-in-Chief, would be opposed to all modern principles in regard to Armies" It was feared that the system now obtaining would lead to the diversion of too large a portion of the time of the Commander-in-Chief from his natural military duties, and it certainly appears that the functions and status of that high officer have largely altered

Indian regiments are numbered consecutively, the infantry from 1 to 130, the cavalry from 1 to 30 They have subsidiary titles based upon their composition, their territorial origin, or the names of distinguished officers with whom they were connected

British troops are periodically relieved from England and the Colonies, regiments ordinarily being some fifteen years in India where they are kept on a war-footing by drafts sent from the regimental depots Native troops consist of every warlike class, a great variety of races being found in the ranks Gurkhas and Sikhs to a great extent, are organised in class regiments There are Rajputs of both Punjab and the United Provinces, Jats, Dogras, Marathas, Pathans, Baluchis and Hazaras Mahatras are enlisted in Regiments of the old Bombay Army, Mahomedans from the south of India and from Hindustan are found in the ranks of many corps, and most of the Frontier tribes furnish their quotas

The native officers generally rise from the ranks, but some are given direct commissions, although this system has not been largely adopted The volunteers form a valuable and efficient body of men, who would be most useful in emergency, having a good knowledge of the use of arms and furnishing some of the best shots in the country

The Military Police is largely composed of warlike races, especially in Burma, which is mainly garrisoned by these corps, while in Central India the aboriginal Bhils and em-ployed in the ranks These, however, though a useful auxiliary, do not form part of the Army, and serve under the orders of the Civil Government

The Divisions of the Army are distributed as follows, their headquarters being at the Stations indicated.

Headquarters-Murree	1st Division
Peshawar	2nd
Rawal Pindi	3rd
Lahore	4th
Alcant	5th
Lucknow	6th



The fighting Races  
unmistakable praise (?) India and the War)  
circumstances their courage and fortitude earned  
on the continent of Europe, but in all  
of Indian troops on their first appearance  
this is not the time to speak of the conduct  
typical Turkish Arabian and Chabot  
of war in France and Belgium, in East Africa,  
to reach 200,000, was despatched to the seat  
and, and force of all arms, estimated

cavalry and 60 companies of infantry. Dorens district of Punjab. The ruling Chief of Kasmir is of this caste, of which are 11 squadrons and 60 companies in the army. British are not now largely enlisted, while the Maharattas, famous as predatory horse in the history past, now compose 57 companies of infantry. They are chiefly recruited in the Dekkan and the Konkan. Nor must we forget the Hill Rajputs of Garwal, good and gallant soldiers, who supply two battalions, and the low caste men of Madras so efficient as pioneers and sappers. Some 9,000 Madrasas are still in the ranks.

### Improvements in Conditions

Many improvements have been made in the pay of the soldier and the conditions of service. They are thus summarised in the Report on the Moral and Material Progress of India for the decade 1901-02 to 1911-12. The decade began with an increase of the pay of British troops due to the adoption in India of the proposals of the Home Government for an increase of 2d a day from the 1st April 1902. This involved an additional charge on Indian revenues of some £225,000 a year. In April 1904 a further increase of from 4d to 7d a day was given in the form of service pay. The whole of the service pay issued in India was in accordance with the decision of the Lord Chief Justice, acting as arbitrator between the Imperial and Indian Governments, borne by the latter, the extra charge being thus raised to about £700,000 a year. From the 1st January 1909, in accordance with the invitation announced in the Proclamation of the King Emperor on the fifteenth anniversary of the transfer of Government to the Crown, a general increase of pay for all ranks was granted to the Indian Army, and arrangements were made for the free supply of fuel by Government at a cost of £27,000 a year. The increase was Rs 3 a month for non-commissioned officers and men of the hillard cavalry and Rs 2 for other troops. Other measures that may be noticed were the raising of the limit of a good allowance, the grant of free passage to all ranks when on the march or at manoeuvres and of free passages by rail (within certain limits) for men called home on urgent private affairs—all introduced in 1906, the revision and improvement of the pension rules of the Native Army, and the abolition of the punishment of flogging in time of peace, except for offences for which that punishment is permissible in civil life, in 1907-08, and a revision of the rates of pay of captains and subalterns of the Indian Army, and of regimental salaries, involving a considerable addition to the emoluments of the junior grades in 1908. Since 1910 considerably more has been made with the improvement of the accommodation for the native troops. It had become obvious that the improvement was a matter of urgency in many cases, and with the persistent rise in prices and wages comfortable and durable buildings could be constructed without a considerable increase of expenditure. In the new lines, a sound type of construction has been adopted, and the work has been entrusted to the M.I.

### Reserves.

The Indian Army Reserve dates from 1886. Under existing arrangements, it consists of men with not less than three years' colour service. Men passing into the Reserve still belong to their respective regiments, and come up for two months' training once in two years. In 1901 when the strength of the Reserve was about 21,500 men, it was decided to raise it gradually to 50,000 men, reducing the reserve pay from Rs 3 to Rs 2 a month, and also to form an Indian cavalry reserve by extending the system to hillard cavalry regiments. Reservists obtain a pension after 25 years' total service. There is a body of reserve officers whose numbers were largely increased soon after the outbreak of the war.

**Reserve of Officers**—For some years there has been entertained what was called 'The Indian Army Reserve of Officers—a small body of trained officers who would be available to replace the casualties amongst the British officers serving with the Indian troops in time of war. This branch of the service was however grievously neglected, the conditions of service were unattractive, the prospects of promotion were practically nil, and the military authorities preferred to rely on the expedient of multiplying the number of British officers serving with Indian troops in order to meet casualties, rather than to train up an effective reserve. This policy tested by the war was found wanting. The casualties amongst the British officers with the Indian regiments were very large indeed, these regiments lost their initiative when deprived of the officers on whom they had been taught to rely, and it was impossible to make the great gaps good from the ordinary officer class, because of their lack of knowledge of the Indian languages and Indian conditions. An appeal for recruits for the Indian Army Reserve of Officers met with a very ready response. The first contingents reached the large proportion of whom were drawn from the Volunteer Officers, or from the ranks of special corps like the Light Horse, who are ordinarily recruited from the officer class. The officers selected were put through a rapid course with British and Indian regiments, made to pass a language test, and when efficient were sent to serve with the Indian regiments at the front. They have done excellent service and have suffered many casualties, indeed without this reinforcement of officers specially acquainted with Indian conditions the efficiency of the Indian Regiments could not have been maintained. It is understood that the numbers are now being raised to two thousand.



## • STRENGTH OF THE ARMY.

April 1914 were as follows —

Troops under the orders of the Commander-in-Chief in India

on 1st April 1914 was 34,293, as against 33,712 on 1st April 1913

REGISTRARS

in 1913-14 as compared with that in 1912-13 was as follows:—

1838

improvement as regards enteric Over 93 an increase

AL BIRNOM 'SABIRI'-JAHUN AYAHU INISSAGONS ASCHU PAAG STU SUFAZI

## EXPENDITURE ON THE MILITARY SERVICES

On the 31st March 1915 the Royal Indian Marine consisted of three troopships and six other sea going vessels, three inland vessels, three flats, and a number of small steamers, launches, &c. There was an establishment of 10 executive officers, 85 engineer officers, 4 warrant officers, and 12 assistant surgeons of the Indian Subordinate Medical Department, and the native crews of the vessels (seamen, artificers, and others) numbered, in all, about 2,270 men.

Anti-venereal inoculation is making progress among Gurkhas. A high mortality, especially among Gurkhas, inoculated.

Marine—The net expenditure on marine service amounted to £366,500 in 1914-15, as against £43,331 in 1913-14. In this amount are included the cost of the Royal Indian Marine and the contribution towards the expenses of His Majesty's ships employed in the Indian seas.

1915-1916 Budget	Revised, 1914-1915	Accounts, 1914-1915	Accounts, 1912-1913	Accounts, 1911-1912
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Rs	Rs	Rs	Rs	Rs	Expenditure
53,56,960	63,44,000	71,56,430	69,75,270	69,23,994	Administration
24,94,870	28,09,000	30,14,241	29,15,887	29,15,540	Military Accounts
8,25,317	10,96,00,000	12,23,80,011	12,20,03,251	12,45,65,223	Regimental Pay, etc
2,60,24,920	3,14,37,000	8,42,78,207	3,36,92,689	3,01,50,763	Supply and Transport
3,28,900	4,07,000	5,02,617	5,00,023	4,93,507	Veterinary
27,34,290	34,72,000	19,24,690	15,68,921	12,58,800	Clothing
43,74,970	54,53,000	46,32,456	49,28,434	47,13,862	Remounts
42,55,040	53,19,000	57,50,474	56,06,320	57,83,758	Medical Services
5,35,610	5,21,000	5,31,826	5,08,157	5,05,770	Medical Stores
80,28,340	1,06,43,000	93,87,161	98,54,097	88,17,906	Ordnance
4,12,460	4,43,000	4,27,183	4,30,154	4,17,979	Ecclesiastical
5,97,350	10,40,000	13,17,675	12,41,097	12,52,272	Education
43,37,000	57,10,000	62,81,040	57,56,698	48,96,685	Compensation for
7,37,71,660	3,11,29,001	28,42,035	31,25,192	89,22,432	Miscellaneous Services
2,00,000	2,00,000	2,10,975	6,98,816	8,74,856	Hutting
7,51,600	7,99,000	8,47,034	15,93,814	8,74,856	Conveyance by road,
37,74,770	43,45,000	42,45,500	38,62,887	43,35,239	river and sea
13,87,550	16,09,000	21,27,408	14,73,915	13,63,144	Conveyance by rail
		1,29,023	—0,79,193	—1,52,782	Cantonments
					Unadjusted Expendi-
					ture
22,19,18,000	22,02,81,000	20,85,59,916	20,62,37,829	20,84,03,972	● TOTAL RS
1,55,87,000	1,10,41,000	1,09,57,429	1,07,43,291	1,04,85,675	Non effective Services—
23,75,05,000	23,13,22,000	21,95,17,345	21,69,81,120	21,83,89,647	TOTAL INDIAN RS
15,833,600	15,421,400	14,634,400	14,465,408	14,592,643	Equivalent in sterling £

	Accounts, 1911-1912.	Accounts, 1912-1913.	Accounts, 1913-14.	Revised, 1914-1915.	1915-1916 Budget
ENGLAND— <i>Effective Services—</i>	Office for British Forces Furlough allowances etc., of British offices Consolidated Clothing Allowances of Bri- tish soldiers Furlough allowances, Indian Service Indian Troop Service Other heads	303,210	351,670	361,405	265,000
	Clothing Stores	58,670	52,712	42,665	129,000
	Ordnance and Miscel- laneous Stores	340,189	506,097	500,128	510,200
	Medical Stores	104,612	93,950	94,406	98,000
	Supply and Transport Stores	51,003	52,870	11,222	70,500
	Operations in Persian Gulf (Stores)	50,620	13,848	12,994	10,890
	Stores taken to India with Troops	36,825	21,409	17,586	19,100
TOTAL	2,439,364	2,589,430	2,078,876	2,380,800	1,907,100
<i>Non effective Services—</i>	Payments to War Office for British forces Pensions, Indian Service Other heads	808,331	919,183	927,020	946,000
TOTAL	2,504,539	2,521,688	2,515,873	2,524,000	2,233,000
TOTAL ENGLAND	4,943,003	5,111,118	5,154,740	4,904,800	4,140,100
TOTAL EXPENDITURE	19,536,546	19,570,520	19,789,289	20,326,200	19,973,700
RECEIPTS	Rs	Rs	Rs	Rs	Rs
India	1,04,91,423	1,33,60,017	1,27,84,798	1,19,46,000	1,11,96,000
Equivalent in sterling £	£	£	£	£	£
England	479,938	800,708	832,320	796,400	746,400
TOTAL RECEIPTS	1,179,366	1,227,803	1,208,508	1,151,520	1,075,100
TOTAL NET EXPENDITURE £	18,357,180	18,348,723	18,585,733	19,174,700	18,898,600

ESTABLISHED STRENGTH OF BRITISH AND INDIAN ARMIES IN BRITISH INDIA (exclusive of Indian Artillery and Followers) for the year 1914-15.

[illegible]

CORPS		INDIAN ARMY																																		
British	Officers	57	6,440	11	3,008	68	10,043	422	24,250	5,154	119,892	341	2,771	341	159,861	21,069	Imperial Service Troops	Artillery Cavalry Sappers & Miners Infantry	Volunteers— Efficients Reservists																	
	Warrant and N-O	129	13,440	211	8,810	87	2,025	341	119,892	1,095	1,562	129	89,819	1,209	212	70,042				11,992	1,963	1,314	686	19,880	818	12,739	19	1,521	781	20,122	1,539	1,549	31	3,054	37,021	31,216
Indian	Officers	11	6,440	11	3,008	68	10,043	422	24,250	5,154	119,892	341	2,771	341	159,861	21,069	Imperial Service Troops	Artillery Cavalry Sappers & Miners Infantry	Volunteers— Efficients Reservists																	
Warrant and N-O	129	13,440	211	8,810	87	2,025	341	119,892	1,095	1,562	129	89,819	1,209	212	70,042	11,992				1,963	1,314	686	19,880	818	12,739	19	1,521	781	20,122	1,539	1,549	31	3,054	37,021	31,216	1,177
British	Officers	57	6,440	11	3,008	68	10,043	422	24,250	5,154	119,892	341	2,771	341	159,861	21,069	Imperial Service Troops	Artillery Cavalry Sappers & Miners Infantry	Volunteers— Efficients Reservists																	
Warrant and N-O	129	13,440	211	8,810	87	2,025	341	119,892	1,095	1,562	129	89,819	1,209	212	70,042	11,992				1,963	1,314	686	19,880	818	12,739	19	1,521	781	20,122	1,539	1,549	31	3,054	37,021	31,216	1,177
Indian	Officers	11	6,440	11	3,008	68	10,043	422	24,250	5,154	119,892	341	2,771	341	159,861	21,069	Imperial Service Troops	Artillery Cavalry Sappers & Miners Infantry	Volunteers— Efficients Reservists																	
Warrant and N-O	129	13,440	211	8,810	87	2,025	341	119,892	1,095	1,562	129	89,819	1,209	212	70,042	11,992				1,963	1,314	686	19,880	818	12,739	19	1,521	781	20,122	1,539	1,549	31	3,054	37,021	31,216	1,177

## THE EAST INDIES SQUADRON.

Commander-in-Chief (Flagant) Captain, C. H. Maxwell Telford  
 Dartmouth, cruiser, 5,250 tons Captain, Judge D'Arcy  
 Roy, cruiser, 4,050 tons. Captain, F. W. Cunliffe  
 Alert, sloop, 980 tons Lieut A Johnstone  
 Espley, sloop, 1,070 tons Commander, W. Nunn  
 Odlin, sloop, 1,070 tons Commander, C. R. Watson

## Contributions to the Navy

A cock and bull story, to the effect that the Native Chiefs of India were going to present three super-lordships and nine first class cruisers to the Imperial Navy, was started in November 1912, and directed public attention to the question whether India was paying an adequate amount for the services rendered by the Navy. "Even the Naval Annual (1913 edition) took part in the agitation for an increased contribution by India. It says— "Amount has been persistent regarding the attitude of India towards the Navy. Some exaggerated statements were published during the year, but nothing definite has been done. This is the more surprising when it is remembered that, although the sea-borne commerce of India totals 115 millions sterling, the annual contribution to the Navy is only £100,000 out of a total revenue of 82 millions sterling. It is true that very heavy expenditures are involved in the military forces of India, but the commerce, coast protection, and transporting of troops is dependent upon Britain's sea power. There is a prospect that India will voluntarily follow the example of the self-governing Dominions."

The proportion of contributions from the overseas Dominions towards naval expenditure is shown in the following table issued with the last Navy Estimates that gave details—

Received from	Nature of Service	Total
India	Maintenance of His Majesty's Ships in Indian Waters (on account of work performed by the Admiralty)	100,000
Australian Commonwealth	Indian Troop Service	3,400
Canada.	Repayment on account of services rendered by His Majesty's Ships engaged in the suppression of the Arms Traffic in the Persian Gulf	64,000
Australian Commonwealth	Contributions on account of liability for Retired Pay of Officers and Pensions of Men lent from the Royal Navy	10,800
Do	Survey of the N W Coast of Australia	7,500
Dominion of New Zealand	Maintenance of an Australian Squadron and of a branch of the Royal Navy Reserve	41,600
Union of South Africa	Maintenance of an Australian Squadron and of the Imperial Navy generally, (also of a branch of the Royal Naval Reserve	100,000
Newfoundland	General maintenance of the Navy	85,000
	Maintenance of a branch of the Royal Naval Reserve	3,000
		112,000





<p>War 1900-01 Boer Rebellion in China, relief of Peking 1902-04 Somaliland Expedition</p> <p><b>Personnel, 1915.</b></p> <p>DIRECTOR Captain Walter Ramsden, CVO, CBE, FRS, A-D-C, Office Residency, Government Dock- yard, Bombay. (The Director, RMY, advises the Govern- ment of India on all maritime matters). DEPUTY DIRECTOR Captain D J C Hordern, RIM, OR Resi- dence, Government Dockyard, Bombay. ASSISTANT DIRECTOR. Captain E G Mills, RMY, OR Residence, Marine House, Calcutta <b>OFFICERS</b> Commanders Lieutenants and Sub-Lieutenants Chief Engineers Engineers and Assistant Engineers WARRANT OFFICERS Gunners Clerks Landing Drivers</p>	<p>Tara 1818 Expedition against Sultan of Gambur 1817-18 Maharratta War, capture of forts at Seremdroog 1810 Expedition to exterminate piracy in the Persian Gulf 1820 Capture of Moehra 1821 Expedition against the Beni-koo-Ali Arabs 1824-26 First Burma War 1827 Blockade of Berbera and Somali Coast 1835 Defeat of Beni Yas Pl- rater 1838 Expedition to Afghanistan and capture of Karachi 1838 Capture of Ader- 1840-42 War in China 1843 Second War Battle of Alenace, capture of Hyderabad 1845-46 Maori war in New Zealand 1848-49 War in Punjab, siege of Mooltan 1852 Second Burma War, Capture of Raangoon, Martaban, Bassein, Prome and Pegu 1855 Persian War, capture of Bushlic, Muhammerrah and Ahvaz 1856-57 War in China 1857-59 The Indian Mutiny 1859 Capture of the Island of Beyt 1860 China War, Canton, Taku Forts, Patsman and Pekin 1871 Abyss- inian War 1882 Egyptian Campaign 1885 Egyptian Campaign 1885 Third Burma War 1886 Chin-I-shai Expedition 1890 Suakin Expedition 1897 Expedition to Imtilib, Mombassa E Africa 1899-1902 S African</p>
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# PLTTS OFFICERS AND MEN

2,225 Recruited from the Ratnagiri District of the Bombay Presidency

## SHIPS

Troops  
R I M S Duffin \*  
6315 tons  
10,191 Horse Power

" " "

“ 8406. YACHTING ” “

" For assistance " from other sources.

Station Ship " Dalhousie\* 1524 "

" May 1195 "

Despatch Vessel "Lawrence" 903 "

300 7-1986 51-1-15

Special Service " " 080 "

Investigator 1014 Ship Survivors

" *Palinurus* 209

River Steamer  
" Comet\*  
182 "

\* On Special Service

In addition to the above are 30 launches composed of special service launches, target, towing tugs, powder boats, military service launches, etc

## Dochyards

There are two Royal Indian Marine Dock-yards at Bombay and at Calcutta, the former being the more important. There are 5 graving docks and a wet basin at Bombay, together with facilities which enables the whole of the repairs for the ships of the East India Squadron of the Royal Navy and for the ships of the Royal Indian Marine and local Governments to be carried out, and tugs, lightships, pilot schooners, launches, etc., constructed.

PRINCIPAL OFFICERS, BOMBAY DOCK YARD

R I M Officers.

Staff Officer, Command C W Ramsay, R I M Inspector of Machinery, Chief Engineer T. H Knight, R.I.M.

PRINCIPAL OFFICERS, BOMBAY DOCK YARD

R I M Officers.

Staff Officer, Comdr C W Ramsay, RIM

T. H. Knight, R.I.M.  
Inspector of Machinery, Chief Engineer

Personnel 1915

Captain Walter Ramsden, CVO, CBE, FRS,  
 D-Office Residence, Government Dock-  
 yard, Bombay  
 (The Director, RIM, advises the Govern-  
 ment of India on all maritime matters).  
 Deputy Director  
 Captain D J C Hordern, RIM, OR Resi-  
 dence, Government Dockyard, Bombay  
 ASSISTANT DIRECTOR.  
 Captain E G Villa, RIM, OR Residence,  
 Marine House, Calcutta

## OFFICERS

20	..	Engine Drivers
20	..	Clerks
24	..	Grunners
		WARRANT OFFICERS
75		Engineers and Assistant Engineers
10		Chief Engineers
72		Lieutenants and Sub-Lieutenants
89		Communications

Gummers	..	21
Clerks	..	20
Engine Drivers	..	20

Port Officer, Akvab, Moulmein and Basein.	Boiyab
Marine Transport Officer, Mandalay, and Super-	Port Officer, Assistant Port Officer, 1st
Intending Engineer, Mandalay.	Engineer and Shipwright Surveyor and 2nd
	to the Government of Bombay
	CALCUTTA
President, Port Officer and Deputy Conser-	Port Officer, Deputy Port Officer and As-
uator of the Port	istant Port Officer, 2nd and 3rd Engineers
CHITTAGONG	and shipwright surveyors to the Government
Port Officer, and Engineer and Shipwright	of Bengal
Surveyor	BURMA
ADEN—Port Officer	Principal Port Officer, Burma, First Assist-
KARACHI—Port Officer	ant Port Officer, Rangoon Engineer and ship-
Port BLAIR.—Engineer and Harbour Master	wright surveyor to Government of Burma
	Assistant Do do do do

### Expenditure.

Recent expenditure on the Royal Indian Marine under all heads has been —

1913-14	£ 512,645
1914-15	£ 455,700

Against this were receipts, from Dockyards, for outside work done, and from sales of vessels, stores, etc., which amounted in 1913-14 to £ 89,542 and in 1914-15 to £ 89,400 so that the actual cost to the State for the whole service was —

1913-14	£ 422,303
1914-15	£ 366,500
1915-1916 (Estimated)	£ 382,200

### THE NICHOLSON COMMITTEE

The Earl of Creve (Secretary of State for India) announced in the House of Lords on November 2, 1911, that the Government of India was conducting an inquiry into the various departments, with the view of seeing what economies might be effected, and in that operation the Department of the Army was particularly included, but there would be no sacrifice of the safety of India or any risk in maintaining order. They had been asked by the Government that they should be assisted in making an inquiry into the whole military position by a Committee over which Field-Marshal Sir W. Nicholson would preside.

The Committee met in Simla in May 1912, consisting of—Sir M. Sir W. (afterwards Lord) Nicholson, Lt. General Sir Percy Lake, Chief of the General Staff in India, Lt. Gen. Sir Robert Scallan, Indian Army, and Sir William Meyer, Chief Secretary to the Government of Madras (now Finance Member of Council). The Committee were instructed by their terms of reference—first, to carry out a comprehensive survey of the various circumstances requiring the use of Military Force which arise out of the external or internal situation in India under the conditions which now exist or may probably arise during the next few years. Secondly, the conclusions of the Committee is desirable, held in abeyance during the War.

1914, it was originally stated that the report would not be published. Any action on the Imperial Legislative Council on January 14th, 1914, it was originally stated that the Committee were instructed by their terms of reference a comprehensive survey of the various circumstances requiring the use of Military Force which arise out of the external or internal situation in India under the conditions which now exist or may probably arise during the next few years. Secondly, the conclusions of the Committee is desirable, held in abeyance during the War.

Robert Scallan are credited with having taken a casting vote. But Sir Percy Lake and Sir Marschal was given the invidious advantage of joint report, because the distinguished Field-Marshal what must be called by courtesy, a member of the Committee. Lord Nicholson and Sir William Meyer have taken place within the Committee opinion has taken place within the Committee known for some time past that a division of the Committee (June 2, 1913) it has been published according to the Military correspondence and it was announced in the House of Commons that the Committee's report would not be published. Lord Nicholson left India in April, 1913, until Lord Nicholson left India in April, 1913, deliberations, which were private, continued the efficient maintenance of that force. Its economies might be effected, and in that operation the Department of the Army was particularly included, but there would be no sacrifice of the safety of India or any risk in maintaining order. They had been asked by the Government that they should be assisted in making an inquiry into the whole military position by a Committee over which Field-Marshal Sir W. Nicholson would preside.

# Indian Finance.

The Indian Budget statement for the year 1915-16 was awaited with absorbing interest for this was the first time for an official general statement of the Indian Finance had been affected by the shock of war, the previous occasion being after the Afghan War of 1877-78, when a general misallocation was made as to the cost of the operations. It is true that India, save during the deprivations of the German conflict on the merchant shipping, at the mouth of the Hugel II and at the approaches to Ceylon, did not directly feel the impact of the war. But the whole cost of India in the development has been on the lines of a financial isolation after currency is not in connection with the money markets of London and the world. She is not a part of the international money market, and her foreign trade, and this trade is with the whole world, and in reports largely with the continent of Europe. It was inevitable that almost every branch of Indian finance should be affected by the war. Even in the Indian financial year does not close until the end of March, the financial statement is issued the first of April, and the war has affected the experiences of the months of war. Now the effect of the war may be summarized in a few words. Despite the inevitable reduction in the government's scale of expenditure, a moderate programme of capital works, and to avoid ill-increase in taxation. This was done by slightly increasing the borrowing programme.

**Financial Strength.**—Fortunately, the war found Indian finances in an exceptionally strong position. The Treasury balance, in India and in England, were a million and a half sterling in advance of the estimate. The five crore loan raised in India had been a great success. The agricultural position, which is of vital importance to Indian finance, was exceptionally favourable. The actual gold holdings of the Government of India was £23½ millions. The Presidency Banks were unusually well provided with funds. The only adverse condition was an unusually large stock of piecemeal goods, one for the main heads of import, for shadowing a period of depression in this important branch of trade. On the whole it may be said that never were the economic and financial conditions in the country stronger.

**Effects of the War.**—The first effects of the war were a threatened break in exchange. The financial condition in India (see Currency) make exchange sensitive, because of the large obligations—approximately £18 millions annually—which she has to meet in London. The exchange value of the rupee is maintained through the sale of what are called Reverse Councils, or sterling bills on London Government annuities, and this at once exerted a tranquillising effect on the situation, (used to the value of £83 millions were sold during the year. The next step was to husband the stock of gold. As sovereigns went to a premium and speculators rushed to exchange their rupees and currency notes, and £18 millions were taken before Government stepped in and refused to issue gold altogether to private persons. Then

there was a rush by the people to withdraw their savings Banks deposits and to exchange currency notes for coin. Every facility was offered to both and the rush was stayed before it had produced disturbing results. The total withdrawals from the Post Office Savings Banks amounted to 57 millions. As these deposits represented untimely debt they had to be met out of current balance, and for this purpose Government borrowed heavily from the Gold Standard Reserve (gr). The rush to exchange currency notes for coin was much to the facilities for withdrawal. It was strong-cast in the provisions which had been most severely shaken by the ill-effects of the mushroom growth in 1913, namely, Bombay and the Punjab, and in Burma. The net result of the war was reduced by seven crores of rupees (£13 millions). First-class securities showed remarkable stability, and the decline in Government paper was only three and a half rupees from the very high level reached prior to the outbreak of the war. Indian obligations in London were met without difficulty, owing to the fact that the Government of India had to meet large obligations for the Home Government in India, thus avoiding the necessity for transfers, which on military account. The Government in India, and there was no shortage of money for those with solid credit. The internal trade was dislocated owing to the timidity of the Marwaris, who are the chief middlemen, and many of whom fled to their homes in Rajputana, and the export trade by the cessation of the greater part of the continental demand for those staples like jute, cotton and oilseeds. These are fully considered under Trade. But the total disturbance was far less than anyone had dared to hope. No moratorium was proclaimed, and India met all demands from her own resources. With this brief summary of the special conditions we can proceed to consider the actual budget statement, but for its full understanding it is necessary to indicate the general considerations which give a special character to Indian finance.

**Financial Characteristics.**—Three important factors have to be borne in mind in considering the finances of India. The first is that the Budget of the Government of India includes also the transactions of the Local Governments, and that the revenues employed by the latter are mainly derived from sources which they share with the Central Government. The principles underlying the relations of the supreme with the local governments are explained in the chapter dealing with this question. Generally speaking, certain heads of revenue are divided equally between the provinces and the Imperial Government, and certain heads are enjoyed entirely by the local governments. These vary with different provinces, but broadly it may be said that the divided heads are land revenue, excise, stamps, income-tax and the in-coming from the large irrigation works. The Provincial Government take the whole of the receipts under forests and registration, and the income of the



## Budget Estimates for 1915-16

The influence of provincial advances on the Imperial Budget is clearly set out in the following table—

Revised, 1914-15			
Imperial		Provincial	
Total		Total	
Revenue	19,927	30,220	80,156
Expenditure	52,000	72,446	85,115
Deficit (—)	—2,712	—2,217	—4,959

Budget, 1915-1916			
Imperial		Provincial	
Total		Total	
Revenue	19,655	30,692	80,347
Expenditure	52,424	31,755	84,180
Deficit (—)	—2,770	—1,063	—3,833

**Budget Features**—Every Indian budget is based on the expectation of a normal monsoon. But very few Indian monsoons are normal, consequently the story of Indian finance is one of alternate surpluses and deficits. Close estimates being impossible, cautious estimates of revenue must be made. Again, it is no uncommon experience to find that the spending departments are not able to spend up to their estimates, owing to the delay in obtaining material from England, shortage of labour, or the necessity of maturing plans before work can be launched. Although the increased resourcefulness of the people, owing to the extension of industry and the large sums of money that have flowed into the country owing to the high prices of export crops, has introduced a steady force into finance, budgeting is still largely what an ex-Finance Member described it, "a gamble in rain."

The Budget placed the total revenue for the year at £80 347 millions, as compared with £ 80 156 in the previous year. Of this the Imperial share was £49 655 millions as against £49 927. The principal decreases in revenue were under Customs, Salt and Railways. Under Customs (£37,000) because of the general decline in trade, and the cessation of most of the container trade, induced by the war, under Salt (£35,000) because of the large payments of duty made on the eve of the expiry of the financial year in anticipation of an increase in the Imperial share of the Land Revenue of £428,000, and under Opium, consequent on improved prices, of £242,000. The Provincial Revenues were placed at £403,000 higher, almost entirely under the head of Land Revenue.

The expenditure was estimated at £80 347 millions as against £ 80 156, or this £19 655 millions was Imperial as compared with £49 927. There was an estimated saving of £244,000 under Military Services, as all save the most urgent repairs were postponed until the end of the war, and of £127,000 under Imperial Civil Works. On the other hand there was an increase of £520,000 to meet the interest charges on the borrowing programme which will be set out later.

The Provincial Expenditure was estimated at £31 755 millions, or £601,000 less than in the previous year and £2 203 millions below the figure for the year before that. The reason for this very large discrepancy will be apparent from what has gone before, where it was explained that the Imperial Government have made large grants from their opium and other surpluses to the Local Governments for expenditure on Education and Sanitation. These have not been fully utilised, owing to the necessity or preparing programmes and plans, and large sums are held to the credit of the Local Governments in the Imperial Balances. In the special circumstances of the war the Imperial Government might have put an embargo on all expenditure under this head, but realising that this would mean an interruption of schemes already commenced, with consequent waste and hardship, a compromise was struck. The Provincial Governments reduced their estimates by £1 670 million and the Imperial Government allowed them to draw on their accumulated balances to the extent of £1 million. On March 31st, 1916, it is estimated that the Provincial Balances will amount to £7 millions.

## Education and Sanitation

In the Chapter on Finance in the Indian Year Book for 1915 (p. 163) figures were given showing the remarkable progress made in education, medical relief, and sanitation since the year 1911-12, when the Government of India began to give grants from their surpluses for these purposes.



and, under the Famine Insurance Grant head, close or half a million for reduction, or avoid-  
ance of debt, thus raising our assets, to about  
£5 million. Even so, we are left, however,  
with some £9½ million still to find, and have  
also the £14 million of temporary debt still to  
consider. The question now is, how is this  
shortage to be dealt with?

**No additional Taxation**—"The first method of adding to our resources which would naturally suggest itself—one which, indeed, we have very seriously considered—is to follow the lead of the mother country and impose a special tax on this occasion. We do not propose on this occasion to raise any money by increased taxation. We should not hesitate to do so to meet a deficiency in revenue which promised to be of a more or less abiding character. But the present circumstances are altogether peculiar. We know that, ordinarily, we can count on surpluses India too has a very small unproductive debt and, with trade conditions depressed, and the present abnormal rise in food prices in a large part of the country, we have come to the conclusion that we ought not to add to existing taxation unless it is absolutely necessary.

### Borrowing Programme for 1915-16

"In the first place, we propose to continue the loan of £7 million from the Gold Standard Reserve and leave it still outstanding on the 31st March 1916. The Secretary of State also intends to renew in 1915-16 the £7 million of India bills which he has placed this year. This disposes of the temporary debt for the time being, but still leaves us the original £9½ million to find. We propose to obtain £3 million (4½ crores) of this amount in India. In addition to the funds which we thus find in India, it is the Secretary of State's intention to raise £6½ million by fresh borrowing in England, either direct or through the agency of companies working State lines.

"To sum up this examination of a complicated and difficult position, I may briefly state that we propose a reduced but still considerable

**Railways**—"This is a question which properly belongs to the railway heading (q v) but has much as since the disappearance of the profits from the opium trade with China the railway property of the Government of India, for the past five years is indicated in the following table—

	1911-12	1912-13	1913-14	1914-15	1915-16
Capital at charge at end of each year	331,247	340,103	351,302	361,756	368,513
Net working profit from railways excluding interest charges	15,813	17,272	17,616	15,102	14,774
Percentage of net working profit to capital outlay	4.77	5.08	5.01	4.18	4.01
Net working profit from railways after meeting interest charges	3,788	4,803	4,790	1,914	1,179
Percentage to capital outlay of net profits after meeting interest charges	1.14	1.41	1.36	.53	.32

The disadvantage of the railway head is that it still further makes the chances of India dependent on the character of the monsoon. Railway profits entirely hinge on trade, and this hinges on the rainfall, whereas the opium surplus was largely independent of the character of the monsoon.

REPERENCES—The Indian Budget (*Gazette of India*), March 6th, 1915.

India, its administration and Progress (Macmillan) By Strachey Murray.

India and the Durbar (Finance, By Sir William Meyer) Murray.

India, its administration and Progress (Macmillan) By Strachey Murray.

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India, its administration and Progress (Macmillan) By Strachey Murray.



The data of the budget are set out in the following table. As the manner in which the Great Indian Ocean has had revenue railway, irrigation and customs are realised is stated in separate tables (q & r) they need not detail us here

REVENUE	1913-1914	Revised Estimate, 1914-1915	Budget Estimate, 1915-1916
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Particulars of Revenue—	21,391,775	21,213,000	22,010,000
	1,708,878	1,708,000	1,708,000
Salaries	3,410,000	3,407,800	3,407,800
Grants-in-aid	5,115,291	5,011,900	5,107,100
Grants-in-aid	5,991,700	5,970,800	5,970,800
Grants-in-aid	5,108,750	5,130,400	5,151,000
Total Principal Heads			
Interest	1,552,119	1,008,300	1,057,100
Post and Telegraphs	3,537,419	3,519,000	3,579,200
Miscellaneous	33,431	71,800	71,800
Grants-in-aid Civil Department	1,107,286	1,461,000	1,534,000
Grants-in-aid	772,579	750,600	838,200
Grants-in-aid	17,025,001	15,298,300	15,029,300
Grants-in-aid	4,711,159	4,713,000	4,793,800
Grants-in-aid	295,610	208,100	250,100
Grants-in-aid	1,503,052	1,311,700	1,220,300
Total Revenue			
83,207,175	80,150,300	80,146,900	83,117,200
Total Expenditure			
83,207,175	80,150,300	80,146,900	83,117,200
Total			
83,207,175	82,897,900	82,897,900	83,117,200
THE LAND REVENUE			
The principle underlying the Land Revenue			
system in India has operated from time immemorial. It may be roughly formulated thus—			
correct description of the relation between the Government and the cultivator. The			
former Government is the supreme landlord and the revenue derived from the land is equivalent to rent. On strictly theoretical grounds, ex-			
latter pays for it according to the value of his			

holding. The official term for the method by which the Land Revenue is determined is "Settlement." There are two kinds of settlement in India—Permanent and Temporary. Under the former the amount of revenue has been fixed in perpetuity, and is payable by the landlord as distinguished from the actual cultivation. The Permanent Settlement was introduced into India by Lord Cornwallis at the close of the eighteenth century. It had the effect of converting a number of joint revenue farmers in Bengal into landlords occupying similar status to that of the joint owners in Europe. The actual cultivators became solely responsible for the payment of the revenue, the former lost the advantage of holding from the State. This system has prevailed in Bengal since 1793 and in the greater part of Oudh since 1850. It also obtains in certain districts of Madras.

**Temporary Settlements**

Elsewhere the system of Temporary Settlements is in operation. At intervals of thirty years, more or less, the land in a given district is subjected to a thorough economic survey, on the basis of the trigonometrical and topographic surveys carried out by the Survey Department of the Government of India. Each village area, wherever the Temporary Settlement is in vogue, has been carefully mapped, property-boundaries accurately delineated, and records of rights made and preserved. Under the system of Temporary Settlements, wherever the Government of India takes from a general enhancement of values. But the principle that improvements effected by private enterprise shall be exempt from assessment is now accepted by the Government and provided for in dubitable rules.

### Incidence of the Revenue

[illegible]

progressive redistribution is the key-note of the Government's policy, and the standard of 50 per cent. of the assets is more often departed from on the side of deficiency than excess, (2) in the same areas the State does not hesitate to interfere by legislation to protect the interests of the tenants against opposition at the hands of the landlords, (3) in *Ryotwari* tracts the policy of long term settlements is being extended, and the proceedings in connection with new settlements simplified and cheapened, (4) local taxation (of land) as a whole is neither immoderate nor burdensome, (5) the over-assessment is not as alleged, a general or widespread source of poverty, and it cannot fairly be regarded as a contributory cause of famine. At the same time the Government laid down as principles for future guidance—(a) large enhancement of revenue, when they occur, to be imposed progressively and gradually, and not *per saltum*, (b) greater elasticity in revenue collection, suspensions and remissions being allowed according to seasonal variations and the circumstances of the people, (c) a more general resort to reduction of assessments in cases of local deterioration.

**Protection of the Tenants**

In regard to the second of the above propositions noted above, various Acts have been passed from time to time to protect the interests of tenants against landlords, and also to give greater security to the latter in possession of their holdings. The Oudh Tenancy Act of 1850 placed important checks on enhancement of rent and eviction, and in 1900 an Act was passed enabling a landlord to entail the whole or a portion of his estate, and to place it beyond the danger of alienation by his heirs. The Punjab Land Alienation Act, passed at the instance of Lord Curzon, embodied the principle that it is the duty of a Government which derives such considerable proportion of its revenue from the land, to interfere in the interests of the cultivating classes. This Act greatly restricted the credit of the cultivator by prohibiting the alienation of his land in payment of debt. It had the effect of arresting the process by which the Punjab peasants were becoming the economic series of money-lenders. A good deal of legislation affecting land tenure has been passed from time to time in other provinces, and it has been called for more than once in Bengal, Government Reports of the Respective Provincial Settlements, the Bengal Cultivator was rack-

While the Government thus interferes between landlord and tenant in the interests of the latter, its own attitude towards the cultivator is one of generosity. Mention has already been made of the great advantage to the agricultural classes generally of the elaborate systems of Land Survey and Records of rights carried out and maintained by Government in the Administration Report of Bombay for 1911-12, it is stated—"The Survey Department has cost the State from first to last many lakhs of rupees. But the outlay has been repaid over and over again. The extensions of cultivation which have occurred (by allowing cultivators to abandon unprofitable lands) have thus been profitable to the State no less than to the individual, whereas under a *Zemindari* or *Rindad* system the State would have gained nothing, however much cultivation had extended throughout the whole of 30 years' leases." On the other hand, the system is of advantage to the ryots in reducing settlement operations to a minimum of time and procedure. In the collection of revenue the Government consistently pursues a generous policy. In times of distress suspensions and remissions are freely granted after proper inquiry. The amount of gross revenue raised on the land is estimated in 1915-16 at ₹22,09,600 out of a total from all sources in the same year of ₹80,39,600. This compares very favourably with the ₹34,000,000 of land revenue recorded as having been raised annually from a smaller empire by Aurangzeb.

The literature of the subject is considerable. The following should be consulted by readers who require further information—'Land Revenue Policy of the Indian Government,' 1902 (Superintendent of Government Printing), Baden Powell's 'Land Systems of British India,' Sir John Strachey's 'India, its Administration and Progress, 1911,' (Macmillan & Co.), 'The Problems of British India' (Macmillan & Co.), 'The Annual Administrative Reports of the Respective Provincial Governments' (million & Co, 1910), and the Annual Administration Reports of the Respective Provincial Governments.

## EXCISE.

The Excise revenue in British India is derived from the manufacture and sale of intoxicating liquors, hemp drugs and opium. It is a commonplace amongst certain sections of temperance reformers to represent the traffic in intoxicating liquors as one result of British rule. There is, however, abundant evidence to show that in pre-British days the drinking of spirituous liquors was commonly practised and was a source of revenue. The forms of intoxicating liquor chiefly consumed are country spirit, fermented palm juice, beer made from grain, country brands of rum, brandy, etc., locally manufactured malt beer and imported wine, beer and spirits. Country spirit is the main source of revenue, except in the Madras Presidency, and yields about two-thirds of the total receipts from liquors. It is usually prepared by distillation from the Mahuva flower, molasses and other forms of unrefined sugar, fermented palm juice and rice. The British inherited from the Native Administration either an uncontrolled Out-Still System or in some cases a crude Farming System and the first steps to bring these systems under control were the limitation of the number of shops in the area farmed, and the establishment of an improved Out-Still System under which the combined right of manufacture and sale at a special shop was annually granted. This of course was a kind of control, but Government to impose on the liquor traffic as a vend lice. It did not

graduate the taxation accurately on the still-head duty principle not to insist upon a standard of purity or a fixed strength of liquor Moreover for political and other reasons the extent of control could not at first be completely there were tribes of aborigines who regarded the privilege of making their own liquor in their private homes as a long established right, and who believed that liquor poured as libations to their god should be such as had been made by their own hands. The introduction of any system amounting to those people had to be worked very cautiously. Gradually, as the Administration began to be consolidated, the numerous native pot-stills scattered all over the country under the crude arrangements then in force began to be collected into Central Government enclosures called Distilleries, thus enabling Government to perfect its control by narrowing the limits of supervision, and to regulate its taxation by imposing a direct still-head duty on every gallon leased from the Distillery. Under Distillery arrangements it has also been possible to regulate liquor and its disposal subsequent to it leaving the Distillery by means of a system of transport passes, established under supervision, improved distribution and vend arrangements.

**Various Systems**

The Out Still System may be taken to include all systems prior in order of development to the imposition of Still-head duty. Briefly stated the stages of development have been—First farms of large tracts, second farms of smaller areas, third farms of the combined right to manufacture and sell at particular places without any exclusive privilege over a definite area, fourth farms of similar right subject to control of means and times for distilling and the like. The Provincial Governments have had to deal with the subject in different ways suited to local conditions, and so the order of development from the lower forms of systems to the higher has not been always everywhere identical in details. Yet Administration in most provinces of British India has progressed on uniform lines, the keynote lying in attempts, where it has not been possible to work with the fixed duty system and fixed duty systems with the object of securing that every gallon of spirit should bear a certain amount of taxation. The Out-Still System has in turn been superseded by either the Free-supply system or the District Monopoly system. The Free-supply system is one of free competition among the licensed distillers in respect of manufacture. The right of vend is separately disposed of. The District Monopoly system is one in which the combined monopoly of manufacture and sale in a district is leased to a farmer subject to a certain amount of minimum still-head duty revenue in the monopoly area being guaranteed to the State during the term of the lease.

The recommendations of the Indian Excise Committee of 1905-06 resulted in numerous reforms in British India, one of them being that the various systems have been or are gradually being superseded by the Contract Distillery System.

The average incidence of taxation per proof gallon of distillery spirit amounted in 1911-12 to Rs 5.2, Rs 3.9 was derived from still-head duty and Rs 0.10 from vend fees. The average consumption per 1000 of the population in different areas varies from 23 gallons in Eastern Bengal to 173 gallons in the Bombay Presidency. Proprietor (1910-11).

Sap of the date, palmyra, and cocoanut palms, called toddy, is used as a drink either fresh or after fermentation. In Madras and Bombay the revenue is obtained from a fixed fee on every tree from which it is intended to draw the liquor. In Bengal and Burma the sale of shop licenses is the sole form of taxation. Country brands of rum, and so-called brandies and whiskies, are distilled from grape juice, etc. The manufacture is carried out in private distilleries in various parts of India. A number of breweries has been established, mostly in the hills, for the manufacture of a light beer for European and Durban consumption. The uniform fee of 3 annas per gallon is levied all over India at the time of issue.

Foreign liquor is subject to an import duty at the tariff rates, the most important of which is Rs 9.6 per proof gallon on spirit and 3 annas per gallon on beer. It can only be sold under a license.

Drugs—The narcotic products of the hemp plant consumed in India fall under three main categories namely, ganja or the dry flowering tops of the cultivated female hemp plant, charas, or the resinous matter which forms an active drug when collected separately, and bhang, or the dried leaves of the hemp plant, whether male or female cultivated or uncultivated. The main features of the existing system are restricted cultivation under supervision, in bonded warehouses payment of a quantitative duty before issue, retail sale under licenses and restriction on private possession usually sold by auction.

Opium—Opium is consumed in all provinces in India. The drug is commonly taken in the form of pills but in some places, chiefly on social and ceremonial occasions, it is drunk dissolved in water. Opium smoking also prevails in the City of Bombay and other large towns. The general practice is to sell opium from the Government Treasury, or a Central Warehouse to licensed vendors. The right of retail to the public is sold by annual auction to one or several sanctioned shops.

The opium revenue in 1915-16 is estimated at Rs 1,798,000, and the Excise revenue at Rs 7,990,300.

**SALT.**

The salt revenue was inherited by the British Government from Native rule, together with a Liverpool, Germany, Aden, Bombay and Madras branch, one-half of the indigenous salt is manufactured by Government Agency, and the remainder under license and excise systems in the Punjab and Rajputana the salt manufacturers are under the control of the Northern India Salt Department, a branch of the Finance Department in Madras and Bombay the Local Governments Special treaties with Native States permit of the free movement of salt throughout India, except from the Portuguese territories of Goa and Damann, on the frontier of which patrol lines are established to prevent the smuggling of salt into British India. From 1888-1893 the duty on salt was Rs 2-8 per maund of 82 lbs. In 1903, it was reduced to Rs 2, in 1905 to Rs 1-8 and in 1907 to Re 1 at which figure it now stands. The successive reductions in duty have led to a largely increased consumption, the figures rising by 25 per cent between 1903-1908. To illustrate the growth of consumption, in Bengal, the damp climate together with the large volume of fresh water from the Ganges and the Brahma-putra into the Bay of Bengal render the manufacture of sea salt difficult and the bulk of the supply,

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revenue is £3,382,100

## CUSTOMS.

The Indian local system consists of a moderate tariff for revenue purposes only. There is a general import duty of 4 per cent on all goods imported by sea, with special conditions for textiles and a large free list. Export duties are levied only on rice, at the rate of three annas per maund of 82 pounds. The export is principally from Burma. The import duties have varied from time to time according to the financial condition of the country. Before the Mutiny they were 5 per cent in the days of financial stringency which followed they were raised to 10 and in some cases 20 per cent. In 1875 they were reduced to five per cent, but the opinions of Free Traders, and the agitation of Lancashire and the aggrivation of Lancashire

The principal exemptions from the tariff are food grains, machinery, railway material and coal. Iron and steel pay a nominal duty of one per cent.

The Customs revenue for the current year is estimated at £5,434,000

The Customs Department is administered by an Imperial Customs Service responsible to the Imperial Government in the Department of Commerce and Industry, but acting through the Local Governments. The senior Collectors are Co-opted Civilian specially chosen for this duty, the subordinates are recruited in India and in England (Customs Tariff q v)

**Income Tax.**

**Income Tax.**

The income tax was first imposed in India in 1860, in order to meet the dislocation caused by the Mutiny. It was levied at the rate of four per cent or a little more than ½ d in the pound on all incomes of five hundred rupees and upwards. Many changes have from time to time been made in the system, and the present schedule was consolidated in the Act of 1886. This imposed a tax on all incomes derived from sources other than agriculture which were exempted. On incomes of 2,000 rupees and upwards it fell at the rate of five pices in the rupee, or about 1½ d in the pound, on incomes between 500 and 2,000 rupees at the rate of four pices in the rupee or about ½ d in the pound. In March 1903 the minimum taxable income was raised from 500 to 1,000 rupees. The tax is paid by about 3,000,000 people, and although it is not a heavy burden because it was nominally only temporary, it is still the most heavily assessed property tax in the world. The yield of the tax is estimated at 1914-15 at 2,008,719,000, as compared with 1,913-14 at 1,914,741,000.

‘Amen’ and ‘Hallelujah’ and ‘Gloria in excelsis deo’

# THE DEBT OF INDIA.

To understand the debt of India it must be remembered that the Government of India is always a borrower. The country still needs a vast capital expenditure on railways and irrigation, indeed the expenditure on railways is always conditioned not by the needs of the country, but by the ability of the market to supply capital—a supply which is always unequal to the demand. In the case of irrigation the supply of capital has of late years been equal to the amount which could be spent, great irrigation schemes require long and elaborate investigation and when the investigations are complete the actual construction of the works is governed by the labour supply, which is increasingly expensive and rarely equal to the demand. These conditions make India a constant borrower, and she raises every year as much money as the Indian and London money markets can supply. The whole of this money is spent on productive works. The Indian railway system now returns to the State, after paying all interest charges and certain annuities for the redemption of capital, a surplus which varies with the character of the season. The irrigation works return a profit of over five per cent. Whilst therefore India is a constant borrower, she borrows only for expenditure on productive works. Her finance is even more conservative than this, for in most years a sum is set apart from the revenue surplus for expenditure on capital works. Through the operation of this policy the unproductive debt of India has been reduced to negligible proportions. It has been estimated by competent authorities that if a fair balance sheet were struck the balance would be on the right side.

When the trading charter of the East India Company expired in 1855, the rupee debt was Rs 332 95 millions. Fifteen years later, in 1870, the debt reached Rs 453 36 millions, and it stood at almost exactly that sum in the year preceding the mutiny of 1857. That caused a large increase in the rupee debt, which stood at Rs 635 55 millions in 1859-60, the year following the suppression of the revolt. The debt then gradually rose to Rs 697 57 millions by 1874-75, and another large increase occurred in the succeeding decade, due to the great famine of 1877-78 and to the military operations in Afghanistan which followed the famine. By 1883-84 the rupee debt rose to Rs 931 25 millions. There was then a further increase to Rs 980 4 millions in 1887-88, and to Rs 1,007 48 millions in 1888-89, and to Rs 1,052 8 millions in 1893-94. A three per cent loan was raised in July 1896, and the debt stood at Rs 1,082 12 millions at the end of 1896-97 and increased to Rs 1,191 99 millions in 1903-04, to Rs 1,258 75 millions in 1905-06, to Rs 1,366 67 millions in 1909-10, and to Rs 1,397 85 millions in 1911-12.

A four per cent terminable loan of Rs. 43 crores (£8 millions) was issued in 1915. The present dimensions of the debt are given below under the head of "Interest."

**Sterling Debt**

The interest-bearing sterling debt was very small until the mutiny year, but the increase

was rapid after that. As in India, the rate of interest on the sterling debt has been gradually reduced from 4½, and 5 per cent to 2½, 3, and 4 per cent, respectively. At the end of 1910-11 proportions of the debt held at those rates are £11,892,207 at 2½ per cent, £66,721,530 (included 3 per cent, India stock of the nominal value of £3,000,000 issued in August 1900, £2,000,500 issued in 1901-02, £1,500,000 issued in May 1902, £1,500,000 issued in 1903-04, £2,500,000 issued in 1904-05, £12,080,146 issued in 1905-06, and £2,000,000 issued in 1906-07) at 3 per cent and £85,531,174 at 3½ per cent. In May 1907 a 3½ per cent sterling loan of £3,300,000 was raised and in January 1908 a further 3½ per cent loan of £5,000,000 was raised towards providing for the discharge of certain Bombay, Baroda and Central India Railway debentures. Similarly in February 1909, a loan of £7,500,000 and in January 1910 a further loan of £7,500,000 were issued at the same rate of interest. In October 1910, 3½ per cent India Bonds for £4,000,000 were issued for the discharge of the Madras and Indian Midland Railway debentures and in March 1911 a new 3½ per cent sterling loan of £3,500,000 was issued to provide funds for capital expenditure in 1911-12.

**Railway Expenditure**

A large proportion both of the sterling and of the rupee debt was incurred in connection with the construction of railways and other public works. Considerable additions to the rupee and sterling debt were made in the two years 1890-97 and 1897-98 in consequence of famine, plague, war, and the prosecution of railway extension, and to the sterling debt in 1900 and subsequent years for the purchase of the G. I. P. Railway, the discharge of its debentures, and advances of Indian Railway Companies. In addition to the loans incurred during 1907-08 the Secretary of State incurred liability in respect of £2,144,800 debentures of the Madras Railway Company on the purchase of the undertaking on the 31st December 1907. At the end of 1912-13 the total registered debt in India and England was classified as follows—Railways £211,838,119, ordinary £375,520,000, £244,898,777, new capital at Delhi £119,890, interest railways £7,072,548, irrigation £1,282,513, ordinary £1,160,047, other obligations £641,488.

**Interest**

The interest on the rupee debt was at the rate of six per cent in 1822, and the debt bearing this rate was not finally paid off until 1858-59. Meanwhile the Government borrowed, from 1823 until 1852-53, at five per cent and from 1824 (but in a small way until 1835) at four per cent. The bulk of the five per cent debt was converted to four per cent in 1854, but the shock to the credit of the State caused by the higher rate of interest on the rupee debt was at the rate of 4½ per cent. In 1866-67, and the debt at this rate of interest was largely increased in 1871 by the

## Absorption of Gold

conversion of the 5 per cent loan By 1878-79 the whole rate debt bore interest at 4 per cent Rs 151.48 millions at 4 per cent The 4 per cent loans were all converted to 4 per cent by 1893, save for a sum of Rs 10 millions, being a loan from the Maharaja Holkar on account of the Indore State Railway, which is not convertible until about 1970. In the same year a small loan of Rs 35.5 millions was raised at 3 per cent, and in the following year the bulk of the 4 per cent loans was converted to the rate of 3 per cent In 1896-97 a new loan of Rs 40 millions was raised at 3 per cent On the 4th July 1900 a loan of Rs 30 millions was raised at 3 per cent and this was followed by other loans, at the same rate of interest The Budget of 1915-16 provided for an expenditure on interest of Rs 58,00,000 In 1915, in order to meet the higher price of money caused by the war the 4 per cent loan was England, a total of £10,019,000

The debt provided for in the Budget of 1915-16, is as follows—

	Rs.
4 per cent	3,07,00,000
3 per cent	1,42,64,84,400
3 per cent	8,17,52,000
Other debt	1,00,71,390
Temporary Loans	11,00,00,000
Savings Bank Balances	21,32,14,898
<b>Total</b>	<b>5,16,65,7,257</b>

## Absorption of Gold in India

(In lakhs of Rupees)

	1909-10	1910-11	1911-12	1912-13	1913-14	1914-15
1 Net annual addition to the stock or the country	24,00	27,00	40,50	37,50	27,00	11,00
2 Progressive total of additions to the stock	2,16,00	2,43,00	2,83,50	3,21,00	3,48,00	3,59,00
3 Held in mints and Government Treasuries and Currency and Gold Standard Reserve	9,00	9,00	24,00	30,00	22,50	15,50
4 Net annual variation in item 3	9,00	15,00	6,00	—7,50	—7,50	3,43,50
5 Net progressive absorption	2,07,00	2,34,00	2,59,50	2,91,00	3,25,50	3,43,50
6 Absorption of the year	15,00	27,00	25,50	31,50	34,50	18,00

Item 1 shows the amount of gold produced in India plus the net imports (e, imports minus exports) In 1914-15 the gold produced was Rs 3,51 lakhs plus net imports Rs 7,65 Rs 11,00 lakhs in round figures Item 2 shows the progressive total of the figures in item 1 to the end of each year Total at end of 1914-15 Rs 3,48 lakhs plus figure for 1914-15 Rs 11,00 lakhs = 3,59,00 lakhs at the end of 1914-15 Item 3 shows the reserve held in India plus the amount of gold received into the mints in each year Item 4 shows the annual variation in the actual amount held in the mints and in the reserves in India Amount held in 1914-15 Rs 15,50 lakhs minus that held in 1913-14 Rs 22,50 lakhs is equal to—Rs 7,00 lakhs shown against this item in 1914-15 Item 5 shows the difference between item 2 (progressive total) and 3 (amounts held in the mints, etc) Rs 3,59,00 lakhs minus Rs 15,50 lakhs = Rs 3,43,50 lakhs in item 5 Rs 3,43,50 lakhs minus Rs 3,25,50 lakhs difference between two successive figures in item 5 Rs 3,43,50 lakhs during 1914-15 Item 6 shows the addition to the stock (e, Rs 18,00 lakhs during 1914-15, or, in other words, the difference between item 1 (annual lakhs), i.e., Rs 1 and item 4 (net variation in item 3), Rs 11,00 lakhs minus (—Rs 7,00

AMOUNT of the RUPEE and SERRING DEBT and of the INTEREST thereon, annual INCREASE or REDUCTION of the DEBT, and the PROPORTION of the RUPEE DEBT held in LONDON, from 1820-21 to 1915-16

	Registered debt in India	Registered debt in London	Interest payable.	Amount borrowed and paid off each year (Borrowed +, paid off—)		Rs.
				In India	In England	
1820-21	27,24,77,630	5,762,888	1,63,15,400	253,247	—109,268	(a)
1830-31	39,12,96,080	8,756,479	1,74,10,770	+75,52,710	—15,413	
1840-41	29,47,03,040	1,756,992	1,35,37,050	+1,15,89,400	—400	
1850-51	45,12,87,550	3,920,592	2,12,39,750	+1,00,72,750	+100	
1860-61	63,44,58,100	28,480,017	2,88,34,400	—10,05,090	+1,138,000	
1861-62	63,42,08,450	32,116,217	2,88,32,440	—2,49,050	+3,019,300	
1862-63	63,82,11,060	31,860,017	2,89,05,320	+10,02,610	—256,200	
1863-64	63,40,38,320	26,332,517	2,88,00,180	—41,72,740	—5,527,500	
1864-65	63,30,66,840	20,146,017	2,88,00,400	—3,71,480	—186,500	
1865-66	62,38,10,770	26,067,317	2,84,13,000	—9,56,070	+821,300	
1866-67	62,07,84,230	28,550,017	2,87,13,200	1,274,230	+1,502,000	15,38,00,930
1867-68	63,76,50,020	29,718,417	2,91,57,860	1,448,875	+1,158,500	
1868-69	63,41,06,910	31,218,017	2,89,87,270	1,400,910	+1,500,500	
1869-70	65,59,34,220	35,217,017	2,08,17,500	1,020,868	+3,098,700	
1870-71	66,80,90,570	37,627,017	3,01,56,310	1,726,253	+2,100,000	
1871-72	67,06,89,420	39,012,017	2,98,08,300	1,751,618	+1,152,850	
1872-73	66,45,83,690	39,012,617	2,89,20,500	1,831,467	+1,385,000	
1873-74	66,41,72,910	41,117,017	2,89,50,000	1,867,122	+2,105,000	
1874-75	69,84,99,590	48,507,033	3,03,15,350	2,163,364	+7,470,416	
1875-76	72,77,29,810	49,707,033	3,10,20,180	2,212,582	+1,200,000	
1876-77	71,92,31,260	55,397,033	3,10,08,710	2,436,271	+5,600,000	14,21,01,640
1877-78	74,05,45,200	59,077,033	3,22,08,610	2,607,472	+3,03,13,040	15,78,70,173
1878-79	78,83,89,200	59,020,117	3,25,77,260	2,581,555	+3,88,44,060	17,14,82,760
1879-80	82,87,25,000	68,855,556	3,41,70,600	1,937,886	+1,03,35,830	20,52,00,970
1880-81	85,95,97,400	71,420,133	3,55,92,700	2,840,478	+3,08,72,370	20,26,31,450



AMOUNT OF THE RUPEE AND STRIKING DIBT—(contd.)

	Registered debt in India.	Registered debt in London	Interest payable.	Amount borrowed and paid off each year (Borrowed +, paid off—)		Proportion of the registered rupee debt held in London on 31st March
				In India	In England	
1881-82	Rs. 88,05,31,020	£ 68,181,947	Rs. 3,06,13,280	Rs. +2,00,31,100	£ -3,287,186	Rs. 22,05,60,550
1882-83	80,08,87,060	68,586,601	3,74,11,400	+2,01,50,010	+11,717	22,05,11,350
1883-84	93,10,13,810	68,108,837	3,84,01,110	+2,60,20,180	-470,857	22,08,75,180
1884-85	93,18,90,000	69,271,088	3,87,18,650	-77,240	+1,162,251	21,83,08,370
1885-86	92,70,30,820	74,809,021	3,77,38,350	-17,00,780	+4,615,553	20,71,23,580
1886-87	92,05,30,800	84,228,177	3,82,02,570	-5,01,400	+10,421,650	19,14,05,670
1887-88	98,08,98,020	84,140,148	4,03,78,680	+5,43,02,260	-88,020	20,81,88,870
1888-89	1,00,87,07,420	95,033,010	4,13,73,120	+2,78,08,800	+10,801,462	21,71,40,080
1889-90	1,02,70,11,750	98,102,301	1,21,56,080	3,327,348	+3,158,781	21,50,40,400
1890-01	1,02,74,06,550	104,408,208	1,17,61,110	3,624,376	+2,216,817	20,73,12,050
1891-02	1,02,00,23,170	104,404,143	1,17,15,000	3,002,349	+2,005,935	27,50,58,410
1892-03	1,02,93,75,520	106,083,707	4,12,77,700	1,570,982	-2,005,935	26,09,38,610
1893-04	1,05,54,00,780	114,113,702	4,20,92,000	3,087,080	+7,130,025	24,01,05,410
1894-05	1,04,17,37,400	110,005,826	3,61,00,140	4,826,323	+1,802,011	23,02,50,600
1895-06	1,03,78,80,280	115,903,732	3,04,00,740	3,007,832	-102,004	25,35,07,520
1896-07	1,00,11,50,530	114,883,233	3,78,43,700	3,813,208	-1,020,400	24,00,06,020
1897-08	1,11,00,56,340	123,274,680	3,87,11,000	3,040,776	+5,301,447	21,50,87,030
1898-09	1,12,05,40,080	124,268,606	3,91,13,310	3,882,768	+3,003,925	21,44,12,380
1899-1900	1,12,47,47,010	124,141,401	3,90,56,317	3,877,026	-124,204	20,81,88,231
1900-01	1,15,43,10,068	133,435,377	4,00,58,000	4,168,351	+9,200,978	20,30,22,034
1901-02	1,10,10,13,838	131,307,090	4,03,00,616	4,213,821	+871,711	19,13,02,234
1902-03	1,17,65,40,600	133,700,201	4,08,37,804	4,238,273	-510,829	18,03,35,034
1903-04	1,19,42,41,035	133,045,814	4,14,90,005	4,282,744	-750,610	17,13,05,234
1904-05	1,22,20,78,235	132,887,101	4,24,02,520	4,282,744	-168,053	16,81,55,234
1905-06	1,26,08,10,618	140,457,430	4,38,10,365	4,715,233	+1,031,105	16,44,82,033
1906-07	1,30,45,50,055	147,467,634	4,58,10,365	4,715,233	+1,031,105	16,40,10,833
1907-08	1,32,82,01,955	156,481,074	4,01,00,110	5,053,032	+8,082,440	16,23,21,733
1908-09	1,31,50,00,505	160,073,360	4,08,10,107	5,210,605	+4,402,205	14,43,10,033
1909-10	1,30,84,33,105	170,105,911	4,70,47,428	5,630,768	+7,802,424	12,78,40,733
1910-11	1,38,00,72,155	177,098,507	4,81,24,302	5,008,417	+1,804,050	11,73,08,533
1911-12	1,30,00,36,205	178,180,507	4,87,70,468	5,705,507	+488,202	
1912-13	1,42,83,04,700	170,170,103		5,764,855		
1913-14	1,53,80,30,100	182,057,267	5,80,00,000	6,002,300		

## THE RUPEE DEBT.

Return of the Interest Bearing Rupee Debt of the Government of India as at 31st August 1915

In Thousands of Rupees

Particulars	Date of Issue	Conditions of Repayment	Amount	Total.
Railway Loans— Maharaja Holkar 4½ p c Maharaja Scindia 4 p c Nawab of Rampur 4 p c Special Loans— Gwalior, 4 p c 1887	(1870-77) (1892-93)	After 101 years Perpetual After one year's notice to be given on or after 1st Dec 1917 By annual instalments of 12 lakhs On or before 30th Novem- ber 1923, but not preceding 30th November 1920 with three months' previous notice	10000 15000 1700	29700
Four p c, Terminable Loan	(1913-16)		12200	12200
Three and Half per cent 1842-43 1854-55 1865 Three and Half p c coupon Reduced, 1879 1900-1	1st Feb 1843 30th June 1854 1st May 1865 16th Jan 1879 30th June 1900		224225 330107 5960 379257 38993 307260 81266	1381902
1896-97	22nd July 1896		81266	1551341

## DISTRIBUTION OF RUPEE DEBT.

(a) Inclusive of 1273 representing Loan raised through Post Office during the month

Calcutta	Inland	Madras	Bombay	Total India
Railway Loans Special Loan 4½ per cent 4½ per cent 3 per cent	29700 12200 1431 272256 12400	6268 85428 6355	13210 337412 12851	29700 12200 5060 1235170 78317
671436	327987	98051	362973	1460447

Proportion in India held by	Held in London	Unissued	Total as above
Indians	Europeans		
Railway Loans Special Loan 4½ per cent 4½ per cent 3 per cent	29700 12200 11225 75268 30113	1213	29700 12200 46273 1381902 81266
818506	641941	89681	1551341

## STERLING DEBT

Debt Bearing Interest		Capital or Debt.		Rate %	
31st March 1914	31st March 1913	31st March 1914	31st March 1913	31st March 1914	31st March 1913
Annual Interest payable	3189807	3192392	3192392	5	5
	190845	1988372	1988372	3	3
	292250	295158	295158	24	24
	70000	87500	87500	31	31
	(Not known)	64604	64604	43	43
	13947	13947	13947	4	4
	19125	19125	19125	43	43
	108058	108058	108058	4	4
	14263	14262	14262	31	31

INDIAN RAILWAY ANNUITIES.

31st March 1914.	5	850538	262000	116851	371301	1268516	488381	3357647
31st March 1915								

## THE INDIAN MINTS.

The Mint in Calcutta dates from the end of the 17th century. The present building, designed by Major N. W. Forbes, was opened in 1831, the central portico being held to be "a copy, on half dimensions, of the temple of Minerva at Athens." The Copper Mint, to the north-east of the silver Mint, was opened in 1865

Mint Master, Major A. L. C. McCormack, B.E.  
 Deputy Mint Master  
 Assay Master, Lieut-Col. J. J. Bourke, M.S.  
 Deputy Assay Master, Lieut-Col. F. T. C. Hughes, I.A., F.C.S.  
 The Bombay Mint.—The first Mint established in Bombay, in 1670, was for the coinage of Mints.

"rudees, pices and butraks," authority for its working being granted by letters patent. The erection of the present Mint was sanctioned by the East India Company in 1833, and was designed by Major John Hawkins of the Bombay Engineers. The cost of construction was estimated at 38 lakhs.

Mint Master, Major G. H. Wills, M.V.O., B.E.  
 Assistant Mint Master, Mr. A. L. B. Gordon.  
 Assay Master, Lt.-Colonel J. Lloyd Thomas Jones, I.M.S.  
 Deputy Assay Master, Capt. H. J. Wills, I.A.  
 During the year 1911-1912 gold to the value of Rs. 2,83,68,380 was tendered at the two

The following statement shows the details of the silver coinage now cut for the Government of India in the two mints during 1914-15 —

	Cuttack	Bombay	Total
Value in Rs	Value in Rs	Value in Rs	Value in Rs
1,26,00,000	54,71,853	1,80,71,853	1,80,71,853
6,09,016	4,51,064	11,51,010	11,51,010
6,68,460	5,24,113	10,92,582	10,92,582
7,36,450	7,12,811	14,70,291	14,70,291
1,16,04,805	71,90,171	2,17,95,376	2,17,95,376
6,01,16,078	6,52,12,179	19,15,68,517	19,15,68,517

The Gold and Silver Assays made during the year numbered.

Cuttack	Bombay	Gold	Silver
Year	191-15	471	10,033
		3,286	4,122

The Indian denominations with their British equivalents are —

Pie = 1/12 penny

Anna (3 pies) = 1 farthing

Rupce (12 pies) = 1 penny

Rupce (16 annas) = 1s 4d

1 lakh (lac) is 100,000 rupces and a crore is 100 lakhs

The equivalents of the rupce in various currencies are approximately as follows —

One rupce = 168 franc (France, Italy, Belgium, &c)

= 136 mark (Germany)

= 16 krone (Austria-Hungary)

= 0 32½ dollar (United States)

= 0 65 yen (Japan)

The denominations of currency notes in circulation are 5, 10, 50, 100, 500, 1,000, and 10,000 rupces

## HISTORY OF THE COINAGE.

The Indian mints were closed to the unrestricted coinage of silver for the public from the 26th June 1893, and Act VIII of 1893, passed on that date, repealed Sections 19 to 24 of the Indian Coinage Act of 1871, which provided for the coinage at the mints for the public of gold and silver coins of the Government of India. After 1893 no Government rupces were coined until 1897, when, under arrangements made with the Native States of Bhopal and Kashmir, the currency of those States was replaced by Government rupces. The re-coinage of these rupces proceeded through the two years 1897 and 1898. In 1899 there was no coinage of rupces, but in the following year it seemed that coinage was necessary, and it was begun in February 1900, the Government purchasing the silver required, and paying for it mainly with the gold accumulated in the Paper Currency Reserve. In that and the following month a crore of rupces was coined and over 17 crores of rupces in the year ending the 31st March 1910, including the rupces issued in connection with the conversion of the currencies of Native States. From the profit accruing to Government on the coinage it was decided to constitute a separate fund called the Gold Reserve Fund as the most effective guarantee against temporary fluctuations of exchange. The whole profit was invested in sterling securities, the 1906 exchange had been practically stable for eight years and it was decided that of the coinage profits devoted to this fund, six crores should be kept in India, instead of the Reserve Fund was named, 'the Gold Standard Reserve'. It was ordered in 1907 that only one-half of the coinage profits should be paid into the reserve, the remainder being used for

The Revenue and Expenditure of the two mints (including interest on capital outlay and other *pro forma* charges) amounted to Revenue, Rs 3,56,224 and Expenditure, Rs 19,45,878

The Revenue and Expenditure of the two mints (including interest on capital outlay and other *pro forma* charges) amounted to Revenue, Rs 3,56,224 and Expenditure, Rs 19,45,878

Nickel coinage was confined to the Bombay Mint and consisted of 42,32,000 anna pieces of the nominal value of Rs 26,47,000 against 46,32,000 pieces of the nominal value of Rs 28,95,000 coined in the previous year

Bronze coinage which was as usual carried out entirely at the Calcutta Mint, consisted of pie, half-pie, and pies of the aggregate value in the preceding year. There was a large return of single pie from circulation and this accounts for the falling off in the coinage. In addition to the coinage work of the Government of India Rs 40,000 worth of cents and half cents were coined for the Ceylon Government, and Rs 3,125 worth of Copper annam cashes for the Pudukkottai Durbar

One rupee = 105 grains of fine silver.  
One shilling = 80½ grains of fine silver.  
One rupee = shillings 2 0 139.

	Ounces
200	Piece or quarter anna
100	Half piece or one-eighth of an anna
50	Pie being one third of a pie or one-twelfth of an anna
33½	The weight and dimensions of bronze coins

Nickel

the people had become thoroughly familiar with the present one and a half

הנהגתו כה נכונה ונאמנה

ה'תרס"ח

1069

was drawn upon to meet the demands for staff.

[illegible]

On a representative amount of 10,000,000 of India

U.S. GOVERNMENT PRINTING OFFICE: 1965 O - 344-124

המחברת מודה לפרופ' ד"ר יעקב גולדמן, ראש המחלקה למדעי החיים, על הסיוע וההכוונה, ולפרופ' ד"ר יעקב גולדמן, ראש המחלקה למדעי החיים, על הסיוע וההכוונה, ולפרופ' ד"ר יעקב גולדמן, ראש המחלקה למדעי החיים, על הסיוע וההכוונה.

\_\_\_\_\_

—	Fl.	SHAL.	VELO.	TOTAL
	grains	grains	grains	grains
	103	13	190	
Half rupee	021	71	90	
Quarter rupee or 1/4	111	31	43	
Annas place	201	11	271	
Eleuth of a rupee or 2 annas place				

## The Paper Currency.

Under Acts VI of 1830, III of 1840, and IX of 1843, the Presidency Banks of Bengal, Bombay, and Madras were authorised to issue notes payable on demand, but the issue of the notes was practically limited to the three cities of Calcutta, Bombay, and Madras. These Acts were repealed, on the 1st March 1862, by Act XIX of 1861, providing for the issue of a paper currency through a Government Department, by means of notes of the Government of India payable to bearer on demand. Since then no banks have been allowed to issue notes in India.

Act II of 1910 amended and consolidated the law on the subject. By it, a note of the value of fifty rupees, as well as a note of any other denominational value which the Governor General in Council may, by notification in the *Gazette of India*, so specify, was declared to be a "universal currency note," that is, legal tender throughout British India and encashable at any office of issue in British India, the then existing sub-offices of Calcutta, Lahore, Karachi, and Cawnpore were abolished, and the first three of these constituted separate circles of issue in addition to Calcutta, Madras, Bombay, and Rangoon. At the same time, by a notification issued under the Act, the further issue of 20-rupee notes was discontinued. By another notification issued in 1911 under section 2 of the same Act a currency note of the denominational value of one hundred rupees was declared to be a "universal currency note."

Act VII of 1911 raised the invested portion of the Currency Reserve from 12 crores to 14 crores with permission to make the additional investment in sterling securities if desired.

### Department of Paper Currency

The function of this department is to issue, without any limits, promissory notes (called currency notes) of the Government of India payable to the bearer on demand, of the denominations of Rs 5, 10, 50, 100, 500, 1,000, and 10,000, the issue being made in exchange for rupees or half rupees or for gold coin, which is not legal tender, from any Paper Currency office or agency, and for gold bullion and gold coin, which is not legal tender, from circle offices on the regulation of the Comptroller General.

### Supply and issue of Currency Notes

Currency notes are supplied by the Secretary of State through the Bank of England on an indent from the Head Commissioner. The Head Commissioner or Commissioners supply the purposes of the Paper Currency Act. Every such note, other than a "universal" note, bears upon it the name of the place from which it is issued and every note is impressed with the signature of the Head Commissioner or of a Commissioner or Deputy Commissioner.

The officers in charge of the circles of issue are authorised to issue, from the office or offices established in their circles, currency notes in exchange for the amount thereof (1) in rupees or half-rupees or in gold coin which is legal tender under the Indian Coinage Act, or in rupees made under the Native Coinage Act, IX of 1876,

### Reserve

The whole amount of currency notes in circulation is secured by a reserve of gold and silver coin or bullion and securities of the Government of India or of the United Kingdom. The total amount of such securities is limited to 140 millions of rupees, of which not more than 40 millions of rupees may be in sterling securities. Under the Act of 1882 the maximum limit of the securities was fixed at sixty millions of rupees, but, the issues having largely expanded, the Government of India was empowered by Act XV of 1890 to raise the limit to eighty millions. The power was utilised to make the invested reserve to seventy millions on the 19th December 1890, and to eighty millions a year later, on the 3rd December 1891. By notification No. 5366 of the 18th December 1896, the invested reserve was raised to one hundred millions, the power to do so having been given by Act XXI of 1896. Act III of 1905 raised the limit to 120 millions and in August of that year 20 millions of the reserve were invested by the Secretary of State in consols and exchequer bonds. In 1907-08 the exchequer bonds were replaced by Consols. By Act VII of 1911 the limit was raised further to 140 millions, and in April of that year 20 millions were invested by the Secretary of State in Consols.

### Currency Chest

Under the Gold Note Acts of 1898 and 1900, the Government of India had obtained authority to hold a part of the metallable portion of the reserve in gold coin (or temporarily in silver bullion) in London instead of in India. The object of these enactments was merely to afford temporary relief to the Indian money market in seasons of stress. A certain amount of gold had in this way been held in London during 1899 and

### Notes when legal tender

A currency note is a legal tender in its own circle (except by Government at the office of issue) for the amount expressed in that note, that is to say, whenever a note forms the integral sum or portion, of any pay mnt, either to Government on account of a revenue or other claim, or to any body corporate or person in British India, it is a legal tender. Fifty, ten, fifty and hundred rupee notes are legal tender throughout British India. Notes of higher denominations than five, ten, fifty and hundred rupees are payable only at the office or offices of issue of the town from which they have been issued. In ordinary circumstances every Government treasury, of which there are about 250 in British India, cashes or exchanges notes if it can do so without inconvenience, and when this cannot be done conveniently for large sums, small sums can generally be exchanged for travellers.

country. No moratorium was declared and the exchange value of the rupee was maintained throughout between the gold points. Of recent years steps have been taken to increase the popularity of the Note issue. The first important measure was the universal issue of Notes up to Rs 100, instead of confining the facilities for encashment to the circle of issue. In 1814-15 two other important steps were taken. It was decided not to re-issue Notes, and so to eliminate the cost and slight paper that is sometimes found in circulation. Orders were also passed that Government Treasuries should freely exchange Notes for coins and vice versa up to the limit of their power. The introduction of an improved form of Note is under consideration. At the close of the financial year, that is to say March 31st 1915, the actual state of the Paper Currency was as follows —

31st March 1915	
Rs	
61,68,00,000	TOTAL CIRCULATION
32,34,00,000	Silver Coin in India
7,64,00,000	Gold Coin and Bullion in India
7,65,00,000	Securities held in India
9,99,99,946	Securities held in England
61,68,00,000	TOTAL RESERVE

It was the policy of the Government of India to give gold from the Paper Currency Reserve freely on demand. But when the war broke out, it became apparent that gold was being withdrawn from the Reserve not to meet legitimate demands, but to speculate. Sovereigns were at a premium in the bazaar, and those who commanded funds took sovereigns from the Paper Currency Reserve and sold them at a profit. Government accordingly declined to issue sovereigns in sums smaller than ten thousand pounds at a time, but as the speculators then clubbed together and formed syndicates to withdraw sovereigns, an absolute embargo was placed on the issue of gold. The effect of these withdrawals, of the abolition of the Silver Branch of the Gold Standard Reserve, and of the transfer of gold from the Paper Currency Reserve to the Gold Standard Reserve in payment of Reverse Councils is seen in the last official statement showing the composition of the Paper Currency Reserve —

25th November 1915	
Rs	
61,92,19,990	TOTAL CIRCULATION
34,20,93,988	Silver Coin in India
7,60,26,106	Gold Coin and Bullion in India
6,15,00,000	Securities held in India
9,99,99,946	Securities held in England
4,00,00,000	TOTAL RESERVE
61,92,19,990	Interest
The interest accruing on the invested reserve is entered in a separate account, and credit of the Government of India in	

1900, but not to any large extent, and the occasion for doing so ceased, except in regard to gold in transit, from the middle of 1900. Act II of 1910, however, gives full power to hold the metallic portion of the reserve, or any part of it, either in London or in India or partly in both places, and also in gold coin or bullion or in rupees or silver bullion, at the free discretion of Government subject only to the exception that London A currency chest was accordingly opened in London and a sum of £8,000,000 was remitted from India in pursuance of this policy, and a further sum of £1,045,000 was transferred to the chest from the Secretary of State's balances during the course of 1905-06. On the 31st March 1915 the London currency chest held £5,100,000 (Rs 765 lakhs) on behalf of the Currency Reserve.

### Metallic Reserve.

The metallic reserve may consist of sovereigns, half sovereigns, rupees, and half rupees, and gold and silver bullion, the last named being valued at the sum spent on the purchase of such bullion. No gold was contained in the reserve between March 1876 and February 1888, and the quantity increased very slowly until February 1889, but from that date it rose rapidly, till the end of March 1900 when it amounted to £7,500,012. Government then took measures to reduce what was considered to be an inconveniently large gold reserve, and at the end of March 1901 the value of the gold reserve had fallen to £5,778,518. In the next three years it again increased continuously from £7,023,921 at the end of 1901-02 to £9,559,564 at the end of 1902-03 and £10,789,567 at the end of 1903-04. During the next three years it remained practically steady, the amount held on the 31st March 1907 being £10,688,841. In 1907-08 the serious monetary crisis in America and the contraction in the exports from India owing to the famine led to a very large increase in the demand for gold at the Currency offices with the result that on the 31st March 1908 the value of the gold reserve had fallen to £6,417,841 inclusive of £3,705,000 held in England. Adverse trade conditions continued in 1908-09 and on the 31st March 1909 the gold reserve had dwindled down to £1,523,414, of which £1,500,000 was held in England. Normal conditions returned in 1909-10 and the stock of gold in the reserve rose to £8,701,716 on 31st March 1910. On the 31st March 1915 the stock in the reserve amounted to £10,200,000 (Rs 1,529 lakhs).

### Effect of the War

The outbreak, of the war found the Government of India in such a strong financial position that it was able to meet with ease all demands upon it. The effect of the war on Finance (q v) is fully discussed in the articles dealing with those two subjects. Here it is sufficient to say that there was a reduction in the demand for currency, due to the slackness of trade, and that the temporary decline of unusual demand for encashment in August and September 1914, showed no signs of recurrence. In the words of the London "Economic Journal" the Indian currency system met the crisis better than that of almost any other

"Profits of note circulation." The interest on the one hundred and forty millions of rupees in the invested reserve amounted in 1914-15 Rs 46,43,585 the expenditure of the Department being Rs 18,56,417 and the profit Rs 28,63,225

The average monthly circulation of the notes has been in millions of rupees —

Five years ending	
1885-86	142 05
1890-91	171 07
1895-96	282 44
1900-01	265 39
1905-06	301 80
1910-11	481 97
1914-15	610 40

## Circulation

5-rupee	
Rs	
3,139,195	10
14,986,196	20
28,774	50
348,290	100
1,600,197	500
47,370	1,000
92,037	1,000
1,051	10,000
20,262,710	Total pieces

Rupees	
Rs	
40,000,000	5
40,000,000	5
40,000,000	5

Current Notes

## The Gold Standard Reserve.

"The gross circulation of each denomination of note on March 31st 1915 was as follows —

1915 —

Rs

3,139,195

14,986,196

28,774

348,290

1,600,197

47,370

92,037

1,051

20,262,710

Value

According to an official estimate the circulating medium in India (including war fluctuations) is approximately as follows —

Rs

120,000,000

40,000,000

40,000,000

The Gold Reserve Fund was first started in the beginning of 1901 when the profits which had accrued from the coinage of rupees from April 1900 amounting to 53 millions were credited to the fund, gradually remitted to England from time to time and there invested in sterling securities. In the following years the demand for rupees for trade requirements necessitated further heavy coinage and the investments held in the Gold Reserve Fund rapidly swelled by the credit of the profits and the interest thereon and amounted at the close of 1905-06 to £12½ millions. During the latter half of this year, abnormal trade activity resulted in an unprecedented demand for silver currency and necessitated exception-ally heavy coinage in a short space of time. To avoid the possibility of a recurrence of similar inconvenience, a separate silver branch of the Gold Reserve Fund was formed and was brought up to its proposed limit of rupees 6 crores (£4 millions) by March 1907, and after being for a short time known as the "Gold Reserve Fund" it was finally named the Gold Standard Reserve at the close of 1906-07, the Reserve contained nearly £17 millions, of which £12½ millions were held in securities, £4 millions in rupees in India and the rest in gold in India and as a book credit. It is not necessary in this report to recount the events of the latter half of 1907-08. It will be sufficient to mention that the sale in India during the first half of 1908-09 of sterling bills on London resulted in the withdrawal from circulation in India of some Rs 12 crores, the equivalent being withdrawn in gold by the Secretary of State from the Reserve in London, securities to the value of over £8 millions being put on the market. By November 1908, the silver in the Reserve in India had reached 18 65 crores. The subsequent improvement in trade conditions necessitated a portion of this silver being transferred to the Paper Currency Department to meet notes and frequent similar transfers continued to be made, the account being adjusted by a transfer in the opposite direction in London, made in gold from the Currency Reserve in the opposite direction. The demand for sterling bills —

and the extent of the demand for sterling bills —

about by this policy, and the extent of the position of the Gold Standard Reserve brought point. The appended tables will show the comparative figures, have not fallen below gold once steadied the exchanges, which whilst they and telegraphic transfers 1-3-27 32 d. This at week, at the following rates — Bills 1-3-29 32d on London to the extent of a million sterling to sell sterling bills and telegraphic transfers the effect that Government would be prepared a notification was issued early in August in London, financial conditions prevailing in London, colour his arrangements by the abnormal arrangements by the abnormal had to the Secretary of State, who naturally had to after a brief interval, necessary to consult, composed entirely of gold and gold securities. Current Reserve in exchange for an equivalent in sovereigns, so that the Reserve was by transferring the rupees therein to the Paper silver branch of the Reserve was abolished adopted were prompt and efficacious. The Reserve in a transition stage. The measures carried into effect, so the emergency round the out before there was time for this policy to be on demand. Unfortunately the war broke, Reverse Councils as they are sometimes called, bills and telegraphic transfers on London, or of State should be prepared to sell sterling should be aimed at, and that the Secretary Reserve in exchange for an equivalent in gold, Reserve transferred to the Paper Currency should be abolished, and the rupees in the were that the silver branch of the Reserve Currency (Commission (q v). Briefly, they we will be found explained in detail in the section to be pursued forward the Gold Standard Reserve of the Currency Commission regarding the policy Effects of the War — The recommendations of which were held in Bombay crores, of which 41 were held in Rs 66 1912, when the resumption of coinage made balance remained at this figure till September 1911, the silver branch in India contained only, 2 90 crores and the Reserve. By March 1911, the silver branch of the Gold Standard Reserve held there to the Gold Standard Reserve Reserve held there to the Gold Standard Reserve





**Sterling Bills**—The following table shows the details of the weekly allotments since the reverse remittances were first offered—continued

Date	Credit	Debit	Balance
December 1, 1911	1,000,000	253,000	747,000
" 10, 1911	1,000,000	171,000	829,000
" 17, 1911	1,000,000	101,000	928,000
" 23, 1911	1,000,000	170,000	758,000
" 30, 1911	1,000,000	50,000	950,000
January 7, 1912	1,000,000	100,000	850,000
" 14, 1912	1,000,000	75,000	925,000
" 21, 1912	1,000,000	75,000	950,000
" 28, 1912	1,000,000	50,000	950,000
February 4, 1912	1,000,000	50,000	950,000
" 11, 1912	1,000,000	50,000	950,000
" 18, 1912	1,000,000	50,000	950,000
" 25, 1912	1,000,000	50,000	950,000
March 4, 1912	1,000,000	50,000	950,000
" 11, 1912	1,000,000	50,000	950,000
" 18, 1912	1,000,000	50,000	950,000
" 25, 1912	1,000,000	50,000	950,000
April 1, 1912	1,000,000	50,000	950,000
" 8, 1912	1,000,000	50,000	950,000
" 15, 1912	1,000,000	50,000	950,000
" 22, 1912	1,000,000	50,000	950,000
" 29, 1912	1,000,000	50,000	950,000
May 6, 1912	1,000,000	50,000	950,000
" 13, 1912	1,000,000	50,000	950,000
" 20, 1912	1,000,000	50,000	950,000
" 27, 1912	1,000,000	50,000	950,000
June 3, 1912	1,000,000	50,000	950,000
" 10, 1912	1,000,000	50,000	950,000
" 17, 1912	1,000,000	50,000	950,000
" 24, 1912	1,000,000	50,000	950,000
July 1, 1912	1,000,000	50,000	950,000
" 8, 1912	1,000,000	50,000	950,000
" 15, 1912	1,000,000	50,000	950,000
" 22, 1912	1,000,000	50,000	950,000
" 29, 1912	1,000,000	50,000	950,000
August 5, 1912	1,000,000	50,000	950,000
" 12, 1912	1,000,000	50,000	950,000
" 19, 1912	1,000,000	50,000	950,000
" 26, 1912	1,000,000	50,000	950,000
September 2, 1912	1,000,000	50,000	950,000
" 9, 1912	1,000,000	50,000	950,000
" 16, 1912	1,000,000	50,000	950,000
" 23, 1912	1,000,000	50,000	950,000
" 30, 1912	1,000,000	50,000	950,000
October 7, 1912	1,000,000	50,000	950,000
" 14, 1912	1,000,000	50,000	950,000
" 21, 1912	1,000,000	50,000	950,000
" 28, 1912	1,000,000	50,000	950,000

HEADS OF REVENUE	1005-06									
	1005-06	1006-07	1007-08	1008-09	1009-10	1010-11	1011-12	1012-13		
<b>PRINCIPAL HEADS OF REVENUE</b>										
Land Revenue	18,835,080	19,703,701	18,710,322	19,760,000	21,332,111	20,877,621	20,761,097	21,922,163		
Opium	6,408,780	6,060,628	5,214,980	5,881,788	5,531,083	7,521,962	6,061,276	5,121,502		
Salt	4,370,410	1,302,706	3,338,098	3,270,160	3,318,058	2,172,950	1,391,272	1,131,371		
Stamps	3,920,301	1,020,008	4,250,610	4,358,304	4,318,304	4,811,691	1,816,129	5,002,115		
Excise	6,687,820	6,898,210	6,227,010	6,380,028	6,617,851	7,030,314	7,030,753	8,277,910		
Provincial Rates	953,001	610,671	625,820	633,505	630,233	551,378	618,680	652,340		
Customs	4,338,017	4,351,002	6,001,494	1,832,204	1,905,118	0,010,000	0,468,667	7,197,243		
Assesse's Dues	1,321,303	1,423,787	1,504,113	1,653,119	1,358,004	1,503,301	1,052,858	1,742,307		
Interest	1,770,600	1,708,911	1,732,610	1,700,891	1,735,386	1,820,657	1,952,179	1,163,009		
Registration	301,050	370,736	415,311	430,940	430,377	425,855	415,302	482,022		
Tributes from Native States	607,430	600,086	684,520	680,030	688,307	607,147	507,005	623,512		
<b>TOTAL</b>	47,657,380	48,786,035	47,650,832	49,204,635	51,089,875	56,040,085	54,205,240	55,838,830		
<b>INTEREST</b>	• • •	034,181	072,103	005,767	037,325	1,181,343	1,465,430	1,473,708		
<b>POST OFFICE</b>	• • •	1,050,724	1,751,146	1,623,099	1,825,020	1,027,280	1,006,022	2,202,136		
<b>TELEGRAPH</b>	• • •	000,854	033,006	1,006,707	078,007	002,851	097,150	1,037,425		
<b>RAILS</b>	• • •	321,183	410,198	443,018	102,054	125,053	196,110	367,100		
<b>RECEIPTS BY CIVIL DEPARTMENTS</b>										
LAW AND JUSTICE										
Courts of Law	276,538	271,423	264,057	230,117	203,339	310,603	322,000	352,051		
Jails	253,229	251,718	254,403	230,234	208,165	237,791	233,354	270,062		
Police	109,872	150,310	153,651	158,123	148,060	155,373	122,738	135,556		
Ports and Pilgrage	146,406	143,062	138,870	139,088	140,983	146,531	151,737	150,746		
Education	130,436	140,988	143,285	138,430	105,875	183,030	202,010	226,126		
Medical	69,316	65,040	62,469	60,649	68,235	63,007	66,847	82,605		
Scientific and other Minor Departments	84,323	89,782	89,164	100,536	100,438	113,432	114,185	111,804		
<b>TOTAL</b>	1,184,210	1,100,820	1,097,010	1,146,077	1,146,076	1,211,123	1,238,131	1,334,847		
<b>UNCLASSIFIED RECEIPTS</b>										
Receipts in aid of Superannuation, &c	106,421	101,887	221,636	105,011	102,086	195,480	201,470	200,386		
Stationery and Printing	73,715	78,745	91,472	95,608	95,384	97,656	96,801	92,076		
Exchange	82,870	100,022	94,611	95,608	44,461	70,084	105,697	100,870		
Miscellaneous	334,487	478,947	304,012	285,126	373,097	314,062	400,018	351,864		
<b>TOTAL</b>	687,493	930,601	711,631	675,705	705,889	677,801	818,076	765,207		

GROSS REVENUE IN INDIA AND ENGLAND, IN £ (16 RUPREES=£1) —(contd.)

HEADS OF REVENUE	1905-6	1906-7	1907-8	1908-9	1909-10	1910-11	1911-12	1912-13
<b>RAILWAYS</b> State Railways (Gross Receipts)	£ 23,680,670	£ 25,781,078	£ 27,200,044	£ 26,700,888	£ 28,023,031	£ 30,620,766	£ 33,670,129	£ 36,086,304
<i>Debt—</i> Working Expenses and Surplus Profits paid to Companies	11,047,231	13,252,245	16,078,834	16,013,080	16,530,801	16,787,041	17,745,040	19,301,720
<b>Net Receipts</b> Guaranteed Companies (Net Traffic Receipts) Subsidized Companies (Government share of Surplus Profits and Repayment of Advances of Interest)	11,042,348 921,976 42,028	12,628,833 308,801 60,180	12,218,110 228,015 62,006	9,880,700 —901 72,203	12,387,130 —48 68,200	13,842,116 — 39,346	15,834,080 — 67,045	17,204,035 3,080 73,174
<b>TOTAL</b>	12,000,051	12,083,823	12,400,331	9,058,041	12,415,378	13,881,401	15,801,725	17,371,780
<b>IRRIGATION</b> Major Works	1,800,166	2,342,231	2,208,014	2,247,034	2,307,077	2,268,051	2,381,533	2,607,478
Direct Receipts	008,770	1,000,081	1,040,633	1,001,044	1,117,388	1,178,005	1,351,405	1,638,245
Portion of Land Revenue due to Irrigation	164,673	183,705	232,046	210,334	235,691	228,405	247,054	265,404
<b>TOTAL</b>	3,002,608	3,532,017	3,480,692	3,558,002	3,600,160	3,603,521	3,980,052	4,411,217
<b>Other Civil Public Works</b>	264,604	287,803	210,006	287,008	208,780	203,843	320,024	355,447
<b>REVENUES BY MILITARY DEPARTMENT</b> Army	1,058,373	1,005,614	908,549	764,710	875,667	948,164	1,001,030	1,107,244
Effective	131,028	122,065	113,030	98,100	102,171	110,405	118,330	120,669
Non-effective	205	.	.	.	.	.	.	.
Re-organisation	.	.	.	.	.	.	.	.
<b>Marine</b>	1,180,000	1,217,600	1,022,479	802,900	877,728	1,058,040	1,170,306	1,227,808
Military Works	143,770	148,175	87,086	125,448	83,400	91,787	84,000	87,069
.	40,300	60,000	67,208	60,254	75,773	70,693	78,701	72,162
<b>TOTAL</b>	1,382,772	1,410,743	1,167,433	1,047,641	1,130,001	1,221,020	1,343,037	1,387,034
<b>TOTAL REVENUE</b>	70,841,800	73,144,664	71,003,276	69,701,636	74,603,105	80,082,473	82,885,760	86,802,608



should be established, and the ratio between the rupee and the sovereign was to be fifteen to one. The mints were to be opened for the public for the coinage of silver Government alone were to have the right to coin silver, subject to directions laid down, and the right to accumulate from this coinage were to be appropriated to form a special reserve in gold. It is of the greatest importance to remember that the Fowler Committee recommended that there should be the normal accompaniment of a gold standard—a gold currency and a gold mint, and emphatically put aside the suggestion that there should be a gold standard without a gold currency—a system which has since obtained some measure of academic support under the name of the gold exchange standard. The chief criticisms of the policy actually pursued centre round the broad issue that whilst accepting the Fowler Committee's recommendations in principle the Government on the advice of a Finance Committee on which the Indian element was reduced until it disappeared, departed from them in practice. With this introduction, we can consider the criticisms levelled at the practices specifically referred to the Chamberlain Committee.

**Cash Balances.**

The cash balances of the Government in India are held in part in India and in part in London. This arises from the necessity of meeting obligations in both countries. Formerly the Secretary of State managed his disbursements with a balance of between four and five millions sterling. But from 1907 onwards this policy was reversed and enormous balances were heaped up in London. The growth of these balances is illustrated by the following figures—

1907	4,607,266
1908	7,083,898
1909	12,799,090
1910	16,697,245
1911	15,292,638
1912	18,390,013

5

### Council Bills

Arising out of this question of the balances in London was the subsidiary one of the rates at which the Secretary of State sold Bills and Telegraphic Transfers on India. The Secretary of State has to meet his Home Charges in London. To do this he sells what are called Council Bills every week. These Bills are offered for tender at the Bank of England every Wednesday morning and successful tenders are given Bills on Bombay, Calcutta and Madras, which are cashed at the Treasury. It is worth paying extra to obtain in transit, it is worth paying extra to obtain what are called Telegraphic Transfers, by means of which rupees can be obtained from the Treasury in India almost immediately after the payment of gold into the account of the Secretary of State in London. Telegraphic Transfers usually sell at a rate of one thirty-second above the rate for Bills. In addition to the weekly allotment the India Office sell bills called "specials" between the weekly allotments, at one thirty-second above the auction rate. The criticism directed against this practice was to the effect that on occasion lower rates were accepted than might have been obtained, and that Bills against the Gold Standard and Paper Currency Reserves were sold below gold export point, thereby diverting the natural flow of gold to India.

**Exchange Value of the Rupee.**

The buttruss of the gold standard under the system recommended by the Fowler Committee was to have been twofold—a gold currency, and a special reserve, built up out of the profits on coinage. It was made the ground of criticism that having decided to adopt these principles, the India Office did practically nothing to establish an effective gold currency. After one abortive attempt, the policy was abandoned. On the other hand, the coinage of rupees was prodigiously heavy. During the years 1905-07 £42 millions' worth of rupees were added to the token currency, which is said to be the heaviest coinage in the history of the world. The result was that instead of endowing India with a gold currency and a subsidiary token coinage, the vast bulk of the metallic circulation was in rupees. The standard was gold, but the circulating medium was silver. According to the latest returns the currency of India is made up of sixty crores of gold, sixty crores of notes, and one hundred and eighty crores of rupees. A certain amount of gold has flowed into the country and had passed into the circulation in the form of sovereigns, but it was confined to the production of token rupees, the lack of any definite policy to popularise the sovereign, and the failure to open the more convenient value than the fifteen rupees Government of India in India were withdrawn from the money market and locked up in the Reserve Treasuries, with the effect of making the great disadvantage of the internal trade, money artificially dear every busy season, to the great disadvantage of the internal trade.

## Gold Standard Reserve.

Falling an effect of gold circulation, the fund formed from the profits on coinage, called the Gold Standard Reserve, became the only effective business of exchange. It was complained that whereas the principle laid down for the management of this fund was clear and definite, they had been systematically departed from in practice. For instance, it is now admitted that the Reserve Committee is of opinion that this fund should be held in gold in India contrary to the expressed desire of the Government of India the Secretary of State decided that it should be held in silver in London. Then in 1900, in order to meet an embargo demand for rupees at the 1901 of the busy season in India, it was decided to hold £3 millions of the Reserve in silver in India. In 1902, it appeared to the Council decided to devote half the profits on coinage to capital expenditure on railways. The great changes were made without consulting the Reserve Committee, and so far as the diversion of a moiety of the profits on coinage was concerned, in direct opposition to the policy of the Government of India.

The critics maintained that their position was made good by the results of the crisis in America in 1907. The sudden cessation of the demand for Indian produce caused by the financial collapse in the United States, combined with a partial famine in India and the heavy arrival of imports in rupees to London established there was a demand for gold in India rather than for rupees in India. The Gold Standard Reserve, which should have been readily available for this purpose, then stood at £50,000 in money at short notice and £14 million in securities. There is no doubt that the weakness of the position thus created paralysed the action of the Government when the emergency arose. Council Bills were unusable. Gold was released only in dribbles of £10,000 at a time, and exchange which was to have been maintained at one and four pence, fell to one-thrice eleven-sixteenths. Later, the India Office had to agree to sell sterling bills on London at gold export point, and £3 millions were taken in this way before the demand was stayed. Various other expedients had to be adopted in order to weather the storm, and it has been calculated that the deterioration in the Secretary of State's position in the year of the crisis was not far short of £25 millions. This experience has been cited as illustrative of the necessity of strengthening the gold reserves of India without any further tampering with the Gold Standard Reserve, of allowing that Reserve to grow without limit, and of keeping a substantial portion, if not the whole, in actual gold.

Apart from the withdrawal of the Gold Standard Reserve to London and its investment there, under an Act of 1905 a sum of £6 million of gold in the Paper Currency Reserve was withdrawn from the Indian Treasury and deposited in the Bank of England under the unqualified control of the Secretary of State. The declared object of this fund was to facilitate the withdrawal of the Gold Standard Reserve, if not the whole, in actual gold.

The Commission commenced its sittings on May 27th, and rose for the recess on August 6th. It then issued what has been called an interim report, but which never pretended to be anything of the sort, and was confined to a reprint of the evidence given up to that point, without comment of any description. This blue book contained the important correspondence which had passed between the Government of India and the India Office on currency and finance questions together with memoranda from the India Office outlining their policy on the principal subjects under examination. It also contained the evidence of the official witnesses on behalf of the India Office—Mr Lionel Abraham, Mr B. Assistant Under Secretary of State for India, Mr E. W. Newmarch, Financial Secretary at the India Office, Mr H. H. Scott, Broker to the Secretary and Mr. H. H. Scott, Broker to the Secretary and Mr. H. H. Scott, Broker to the Secretary.

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Mr I. G. Dunbar, Secretary and Treasurer of the Bank of Bengal, C.I.D., C.S., Collector of Customs, Calcutta, witness on behalf of the Government of India.

Mr Thomas Smith, nominated by the Government of the United Provinces for his knowledge of the currency and banking problems of North India.

Mr M. K. Sundariyer, Secretary to the Economic Association, Madras, nominated by the Madras Government.

**Final Meetings**

The Committee re-assembled on October 23rd and sat until November 1st. During this period it heard the following witnesses—

Sir James Nicolson, C.S.I., Lieutenant Governor of the United Provinces and formerly, Secretary to Government in the Financial Department.

Mr Morton Trevelyan.

Mr Vidya Sagar Pandya, Secretary of the Indian Bank Ltd., Madras, nominated by the Madras Government.

Mr Stanley Reed, LL.D., Editor of "The Times of India," Bombay.

Mr F. C. Harrison, C.S.I., Indian Civil Service (retired) who has held various posts in the Finance Department.

Mr Laurence Currie, Member of the Indian Council and its Finance Committee.

Lord Incheup, a former member of the Indian Council and a former Chairman of its Finance Committee.

Sir Felix Schuster, Barrister, Member of the Indian Council and Chairman of its Finance Committee.

Mr Dadabhai Merwanjee Dalal, Senior Partner Messrs Mercantile and Sons, Stock, Bullion Exchange and Finance Brokers, Bombay, nominated by the Bombay Government.

Sir Guy D. A. Fitchwood Wilson, G.C.I.E., K.C.B., K.C.I.G., late Finance Member of the Viceroy's Council.

Mr Lionel Abrahams, C.B., Assistant Under Secretary of State for India.

Sir P. W. Holderness, K.C.S.I., Under Secretary of State for India.

## THE REPORT.

4. The time has now arrived for a reconsideration of the ultimate goal of the Indian Currency system. The belief of the Committee of 1898 was that a Gold Currency in active circulation is an essential condition of the maintenance of the Gold Standard in India, but the history of the last 15 years shows that the Gold Standard has been firmly secured without this condition.

3. These measures worked well in the crisis of 1907-08, the only occasion upon which they have been severely tested hitherto.

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Mr I. G. Dunbar, Secretary and Treasurer of the Bank of Bengal, whose names and qualifications are given below.

Sir Daniel Mackinnon Hamilton, nominated by the Bengal Chamber of Commerce, India, and Auditor General in India (1903-1910), retired witness on behalf of the Government of India.

Mr Alfred Clayton Cole, Governor of the Bank of England, 1911-1913.

Mr Harry Marshall Ross, retired Calcutta Export Merchant, late Honorary Secretary, Central Committee, Indian Currency Association, nominated by the Bengal Chamber of Commerce.

Sir Alexander McRobert, Indian Woollen Manufacturer, a former President of the Upper India Chamber of Commerce, and a former Member of the Legislative Council of the United Provinces, nominated by the United Provinces Government.

Mr Bhupendra Nath Mitra, C.I.E., Assistant Secretary to the Government of India in the Finance Department. Witness on behalf of the Government of India.

Mr James N. Graham, nominated by the Bombay Chamber of Commerce.

The Hon. Montagu de P. Webb, C.I.E., Chairman of the Karachi Chamber of Commerce.

Mr William Bernard Hunter, Secretary and Treasurer of the Bank of Madras and Chairman of the Madras Chamber of Commerce.

Mr Charles Campbell McLeod, nominated by the Bengal Chamber of Commerce and the East India Section of the London Chamber of Commerce.

Mr Marshall F. Reid, C.I.E., Merchant, Member of the Legislative Council, Bombay.

Mr Le Marchant, a former Member of the Indian Council and a former Chairman of its Finance Committee. A Member of the Indian Currency Committee of 1898.

The report was dated February 24th, 1914, some delay occurring through the necessity of referring it to Sir Henry Chalmers, who had taken up his post as Governor of Ceylon and Sir Shapurji Broacha, who had been obliged to return to Bombay on account of the severe financial crisis consequent on the failure of certain of the swadeshi banks. The report was long and detailed, so the Commission furnished a summary of it, which condensed their opinions and recommendations in the following passages—

1. The establishment of the exchange value of the rupee on a stable basis has been and is of the first importance to India.

2. The measures adopted for the maintenance of the exchange value of the rupee have been necessarily and rightly rather sup-





38 The Finance Committee should, if possible, contain three members with financial experience, representing—

(a) Indian Official Finance.

(b) Indian Banking and Commerce.

(c) The London Money Market.

In any case there should be at least one member with Indian financial experience. The absence of any representative of Indian finance on the Committee since 1911 has resulted in giving undue prominence to the representation of London City experience.

39 While we suggest that the changes recently proposed and now under discussion in the constitution of the India Council may require some modification in order to provide for the continuance of a Finance Committee of Council, we are in sympathy with the desire for expediting financial business, which is one of the objects in view.

40 The present arrangement under which the Assistant Under Secretary of State, having financial experience, is able to share with the Financial Secretary the responsibility for financial business in the India Office has many advantages. For the future we recommend that either (1) the Under Secretary or Assistant Under Secretary of State should have financial experience as at present, or (2) there should be two Assistant Under Secretaries, of whom one should have financial experience.

41 We are not in a position to report either for or against the establishment of a State or Central Bank, but we regard the subject as one which deserves early and careful consideration, and suggests the appointment of a small expert committee to examine the whole question in India, and either to pronounce against the proposal or to work out in full detail a concrete scheme capable of immediate adoption.

#### A Note of Dissent.

The report was signed by Sir James Begbie subject to a note of dissent. In this he pointed out that the currency policy directed to the attainment of stability in the exchange value of the rupee by means of gold reserves collected from the profits realised on the exchange of rupees had brought into existence an extensive token currency, which was not a desirable form of currency for a country which absorbs gold on a very large scale. Sir James Begbie therefore held the view.

"That the true line of advance for the currency policy is to discourage an extension of the token currency by providing increased facilities for the distribution of gold when further increases in the current become necessary. These greater facilities should, I consider, include the issue of gold coins from an Indian mint of a value more suitable for general currency use than the sovereign and half-sovereign, for the purpose of assisting the distribution of gold when, as is frequently the case, the balance of trade is strong in India's favour and gold arrives in considerable quantities."

present regulations in regard to endorsing documents on rupee paper and of creating new forms of securities.

29 The Secretary of State sells Council Drafts, not for the convenience of trade, but to provide the funds needed in London to meet the requirements of the Secretary of State on India's behalf.

30 The India Office perhaps sold Council Drafts unnecessarily at very low rates on occasions when the London balance was in no need of replenishment, but we do not recommend any restrictions upon the absolute discretion of the Secretary of State as to the amount of drafts sold or the rate at which they are sold, provided that it is within the gold points of the rate at which they are sold, provided with reference to the urgency of the Government's requirements and the rate of exchange obtainable, whichever the drafts are against Treasury balances or against the Reserves.

31 There has been some cases of caution in the renewal of debt by the India Office during recent years.

32 The system of placing portions of the India Office balance out on short loan with approved borrowers in the city of London is on the whole well managed, but we draw attention to—

(a) The term for which loans are made

(b) The desirability of giving greater publicity to the methods by which admission is gained to the list of approved borrowers

(c) Some defects in the list of approved securities and especially its narrow range.

33 There is no ground for the suggestion that the City members of the Secretary of State's Council showed any kind of favouritism in placing on deposit with certain banks, with the directorates of which they were connected, a part of the India Office balance at a time when it was too large to be placed entirely with the approved borrowers. But we call the attention of the Secretary of State to the desirability of avoiding as far as possible all occasion for such criticism, though it may be founded on prejudice and ignorance of the facts.

34 We observe that in our opinion the time has come for a general review of the relations of the India Office to the Bank of England.

35 The working of the present arrangements for the remuneration of the Secretary of State's broker should be watched, and if necessary they should be revised.

36 We record our high opinion of the way in which the permanent staff, both in India and in London, have performed the complicated and difficult financial duties placed upon them.

37. We recommend a continuance of a Finance Committee of Council as providing the machinery most suitable for the work required.

[illegible]



to fill in the last Indian, the great line connecting Calcutta with Delhi and the North-Western provinces. When the contract, lapsing, the Government exercised their right of purchase, the line, paying the purchase-money in the form of terminable annuities, devolved from revenue, carrying with them a sinking fund for the redemption of capital. The railway thus became a State line, but it was reserved to the Company which actually works it under the new conditions the last Indian Company brought to the State in the ten years ended 1909, after meeting all charges, including the payments on account of the terminable annuity by means of which the purchase of the line was made, and interest on all capital outlay subsequent to the date of purchase, a clear profit of nearly 20 per cent. At the end of seventy-four years from 1850, when the annuity expires, the Government will come into receipt of a clear yearly income of upwards of £2,700,000, equivalent to the capital of £17½ to seventy millions sterling. No other railway shows results quite equal to the East Indian, because, in addition to possessing its own country by an easy line, it is able to possess its own colonies and employ cheap coal. But with all these advantages which have been acquired under similar conditions as their counterparts, they have proportionately swelled the revenue and assets of the State. It is difficult to estimate the amount which must be added to the capital of the Indian railways in order to counter-balance the loss during the period when the revenue did not meet the interest charges. According to one estimate it should be £50 millions. But even if that figure be taken, the Government have a magnificent asset in their railway property.

### Improving Open Lines

These changes induced a corresponding change in Indian Railway policy up to 1900, the great work had been the provision of trunk lines. But with the completion of the Nagda-Mitra line, providing an alternative broad gauge route from Bombay to Delhi through Eastern Rajasthan, the trunk system was virtually complete. A direct broad gauge route from Bombay to Sind is needed, but chiefly for strategic purposes. The poor commercial prospects of the line and the opposition of the Rao of Cutch to any through line in his territories, keep this scheme in the back ground. There does not exist an adequate connection between India and Burma, although several routes have been surveyed, the mountainous character of the region to be traversed, and the easy means of communication now with Burma by sea, rob this scheme of any vital importance. Further survey work was undertaken in November 1914, the three routes to be surveyed being the coast route, the Manipur route, and the Hukong valley route. The latter gauge systems of Northern and Southern India must also be connected and Karachi given direct broad-gauge connection with Delhi, a project that is now under investigation. But these works are subordinated to the necessity for bringing the open lines up to the standard of the open lines, providing them with leaders. The sudden in-

was at a high premium The first contract  
yearly settlements made these companies  
guaranteed at 22d per rupee, and the half-  
constructed. The five per cent dividend,  
tracts under which the guaranteed lines were  
position is the revision of the original con-  
A very important factor in this changed

**Contracts Revised.**

of the opium trade with China  
In the Indian revenue caused by the cessation  
that the railway profits will fill the vacuum  
a further deficit, but every ground for hoping  
must fluctuate, there is no reason to anticipate  
acter of the monsoon, the railway revenue  
although in a country like India, where the  
gain amounted to £5.49 millions (Rs 827 lakhs)  
For the year ended March 1913 this in-  
creased. But the railway gain has steadily in-  
it, and the net railway gain has steadily in-  
following year there was a reversion to a pro-  
railway accounts for 1903-09. But in the  
profit, there was a deficit of £1,240,000 in the  
to the general increase in prices. Instead of a  
when working expenses were rising, owing  
crisis, led to a great falling off in receipts just  
early panic caused by the American financial  
harvests in India, accompanied by the mono-  
In the following year there was a relapse. Bad  
the average closed upon £2 millions a year  
rapidly. In the four years ended 1907-08  
In accordance with the net receipts to the State  
first time showed a small gain to the State  
for the State. In 1900 the railways for the  
seasons of the year and making a large profit  
of the year, choked with traffic at certain  
Western became one of the great grain lines  
of the Chinab and Jehlum canals, the North-  
borrowed capital But with the completion  
the world's largest system of constructing railways from  
this was the Ganderbal Railway in India—the  
maintaining the unprofitable frontier lines  
owing to the burden of  
ern strike finally  
Dunbad and Sind transformed the North-West  
ferous. The development of irrigation in the  
element to run more favourable  
falling in of the original contracts allowed Govt.  
The  
development of the country rapidly increased  
was in progress. The gradual economic change

**Maintenance a much more important change**

**Railway Profits Commence**

scandal premium  
round company provided funds at a sub-  
railway construction and the stock of all the  
there has been a mild boom in favour  
The requirement of the market was met, and  
At last  
profits over a per cent in both cases. At least  
of to 5 per cent with equal division of surplus  
taken from 3 to 3½ per cent and of rebate of interest  
was substituted an increase in the rate of guar-  
and in their  
purpose, they were further revised, and in the  
as the terms did not at first attract attention  
in force were the conditions arbitrarily extended  
needed the companies was pronounced, though  
Under these terms a considerable number of  
imposed to 3½ per cent on the capital outlay  
meant of their own net earnings, the total being  
each of the main lines net earnings in supply-  
of surplus profits, or 1½ per cent up to the full re-  
absolute guarantee of 1 per cent with a share

Board with the Company's an informal mission was undertaken by Lord Inchcape to reconcile differences. The constitution of the Board is now undergoing further inquiry, and the development generally favoured in the establishment of a Railway Member of the Viceroy's Executive Council

**Management**

The Railways managed by Companies have Boards of Directors in London. They are represented in India by an Agent, who has under him a Traffic Manager, a Chief Engineer, a Locomotive Superintendent, a Store-keeper, a Police Superintendent, (who is appointed by Government), and an Auditor. The State Railways are similarly organised.

**Clearing House**

Proposals have several times been made for the establishment of a Clearing House but the difficulties are too great. The work which would ordinarily be done by the Clearing House is done by the Audit Office of each Railway.

**Government Control**

As the original contracts carried a definite Government guarantee of interest, it was necessary for Government to exercise strong supervision and control over the expenditure during construction, and over management and expenditure after the lines were open for traffic. For these purposes a staff of Consulting Engineers was formed, and a whole system of checks and counterchecks established, leading up to the Railway Branch of the Public Works Department of the Government of India. As traffic developed, the Indian Railways grew this dry nursing, and when the original contracts expired, and the interests of Government and the Companies synchronised, it became not only vexatious but unnecessary. Accordingly in 1901-02 Mr. Thomas Robertson was deputed by the Secretary of State to examine the whole question of the organisation and working of the Indian Railways, and he recommended that the existing system should be replaced by a Railway Board, consisting of a Chairman and two members with a Secretary. The Board was formally constituted in March 1903. The Board is outside, but subordinate to the Government of India in which it is represented by the Department of Commerce and Industry. It prepares the railway programme of expenditure and considers the greater questions of policy and economy affecting all the lines. Its administrative duties include the construction of new lines by State agency, the carrying out of new works on open lines, the improvement of railway management with regard both to economy and public convenience, the arrangements for through traffic, the settlement of disputes between lines, the control and promotion of the staff on State lines, and the general supervision over the working and expenditure of the Company's lines. Two minor changes have taken place since the constitution of the Railway Board. In 1908, to meet the complaint that the Board was subjected to excessive control by the Department of Commerce and Industry, the powers given the status of a Secretary to Government with the right of independent access to the Viceroy, he usually sits in the Imperial Legislative Council as the representative of the Rail- way interest. In 1912 in consequence of complaints of the excessive interference of the

The standard gauge for India is five feet six inches. When construction was started in 1870, when the State system was adopted, it was decided to find a more economical gauge, for the open lines had cost £17,000 a mile. After much deliberation, the metre gauge of 3 feet 3 inches was adopted, because at that time the idea of adopting the metric system for India was in the air. The original intention was to make the metre gauge lines provisional, they were to be converted into broad gauge as soon as the traffic justified it, consequently they were built very light. But the traffic expanded with surprising rapidity, and it was found cheaper to improve the carrying power of the metre gauge lines than to convert them to the broad gauge. So, except in the Indus Valley, where the strategic situation demanded an unbroken gauge, the metre gauge lines were improved and they become a permanent feature in the railway system. Now there is a great metre gauge system north of the Ganges connected with the Rajputana lines and Kathiawar. Another system in Southern India embracing the Southern Maratha and the South India Systems. These are not yet connected, but the necessary link from Khandwa by way of the Nizam's Hyderabad-Godavari Railway, cannot be long delayed. All the Burma lines, and on the metre gauge. Since the opening of the Barak line, illustrating the capacity of the two feet six inch gauge, there has been developed a tendency to construct feeders on this rather than on the metre gauge.

**The Indian Gauges**

order to resist the influence of cyclones in the broad gauge school was strong, and it was thought advisable to have a broad gauge in place of the metric gauge lines provisionally, as soon as the traffic justified it, consequently they were built very light. But the traffic expanded with surprising rapidity, and it was found cheaper to improve the carrying power of the metre gauge lines than to convert them to the broad gauge. So, except in the Indus Valley, where the strategic situation demanded an unbroken gauge, the metre gauge lines were improved and they become a permanent feature in the railway system. Now there is a great metre gauge system north of the Ganges connected with the Rajputana lines and Kathiawar. Another system in Southern India embracing the Southern Maratha and the South India Systems. These are not yet connected, but the necessary link from Khandwa by way of the Nizam's Hyderabad-Godavari Railway, cannot be long delayed. All the Burma lines, and on the metre gauge. Since the opening of the Barak line, illustrating the capacity of the two feet six inch gauge, there has been developed a tendency to construct feeders on this rather than on the metre gauge.

# STATISTICAL POSITION.

In the report on the administration of the Indian railways for the year 1914-15 an important departure is made. The whole history of the Indian railway system is reviewed, and the process which led to its evolution is expounded. The difference between State-owned and State-managed lines between State-owned and company managed lines, and between private lines and those constructed under Branch Line terms is explained. This history is to be included in all subsequent reports and should be studied by those who are in need of further information in the details of the Indian system.

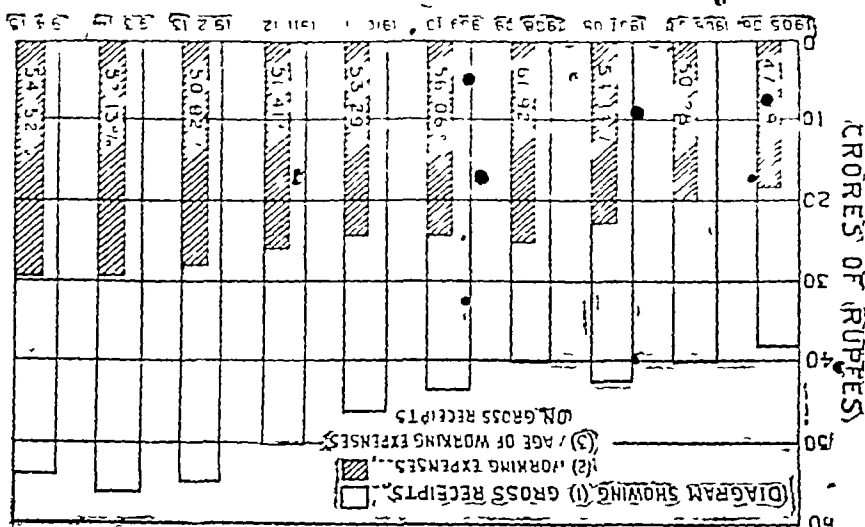
Capital.—The actual capital outlay (booked cost) on lines in which the State is financially interested (excluding premia for the purchase of Companies' lines) from the commencement of operations on all lines open at the close of the year 1914-15 amounted to Rs 4,61,89,79 lakhs and on lines then under construction to Rs 3,03,19 lakhs. In addition Rs 91,37 lakhs were expended on miscellaneous items. The gross earnings of all Indian railways during the year 1914-15 amounted in round figures to Rs 6,04,20 lakhs, compared with Rs 6,338,56 lakhs in 1913-14, being a decrease of Rs 3165.5 lakhs, while the working expenses were only Rs 18,84 lakhs less than in 1913-14. The net earnings amounted to Rs 2,767,91 lakhs against Rs 3,065,62 lakhs in 1913-14 or a decrease of Rs 297.71 lakhs. These net earnings yielded a return on the capital outlay (Rs 51,922.18 lakhs) on open lines, i.e., on mileage earning revenue, of 5.33 per cent, as compared with 6.19 per cent in 1913-14. The corresponding actual return per cent for the previous years is compared as follows:—

Percentage of Expenses	1905	1906	1907	1908	1909	1910	1911	1912	1913-14	1914-15
	6.07	5.06	5.86	4.33	4.81	5.46	5.87	6.77	6.19	5.33

The gross earnings of all Indian railways during the year 1914-15 amounted in round figures to Rs 6,04,20 lakhs, compared with Rs 6,338,56 lakhs in 1913-14, being a decrease of Rs 3165.5 lakhs, while the working expenses were only Rs 18,84 lakhs less than in 1913-14. The net earnings amounted to Rs 2,767,91 lakhs against Rs 3,065,62 lakhs in 1913-14 or a decrease of Rs 297.71 lakhs. These net earnings yielded a return on the capital outlay (Rs 51,922.18 lakhs) on open lines, i.e., on mileage earning revenue, of 5.33 per cent, as compared with 6.19 per cent in 1913-14. The corresponding actual return per cent for the previous years is compared as follows:—

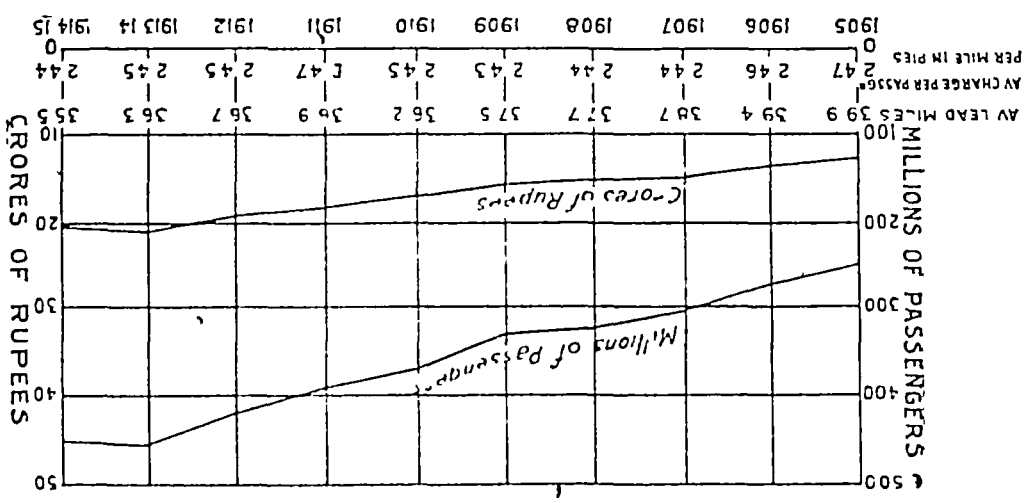
Yield Per Cent	1905	1906	1907	1908	1909	1910	1911	1912	1913-14	1914-15
	6.07	5.06	5.86	4.33	4.81	5.46	5.87	6.77	6.19	5.33

The following diagram shows graphically the ratio of aggregate revenue expenditure to gross receipts of State lines, worked by the State and Companies, for the past ten years:—



Passenger Earnings

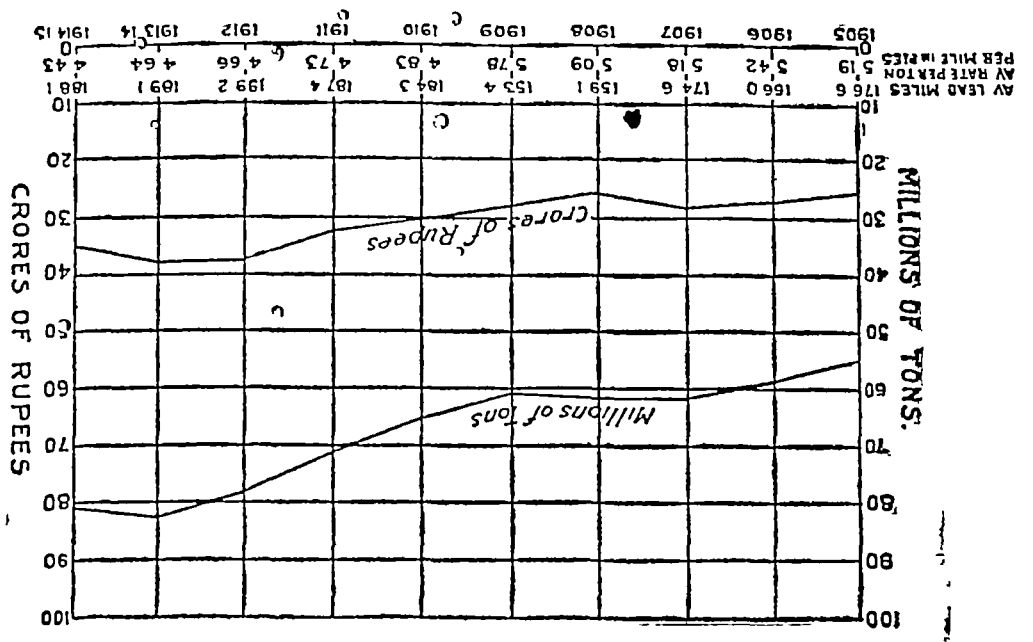
The number of passengers carried and the earnings therefrom are compared in the next diagram —



The decrease in the passenger traffic during the year under review was chiefly due to the effect of the war upon trade and to the absence of tourists and military officers from the country. But for the opening of new railways and the movement of troops consequent on the war, this decrease would have been still greater.

Goods Traffic

A similar comparison of the tonnage of, and earnings from, goods traffic is afforded by the following diagram —



The large falling off in the earnings from goods traffic, which was not accompanied by a corresponding decrease in the quantity carried, was principally due to the low-rated commodities (coal and grain and pulse) carried and to the war and famine conditions.



**Mileage**—During the year 1911-12, 452.70 miles of railway were opened to traffic, bringing the total mileage operated, allowing for minor corrections due to realignments, etc.) up to 32,285 miles. The additional mileage was made up as follows:—

[illegible]

For the second year in succession the mileage on the 7-10 gauge opened to traffic during the year of railway which have been complicated by Companies who have obtained concessions on rebate of railway mileage which have been financed by any other one method and have been constructed with money raised in India. Of the total mileage of 257 in need in der these terms 210 miles have been constructed with money raised in India.

**Ten Years' Progress**—The progress made during the past ten years is summarised in the following table—

— 2175, 2176, 2177

Vehicle opened at the end of

Year	1903	1906	1907	1908	1909	1910	1911	1912	1913-14	1914-15
Grain	15,028	15,548	15,821	15,051	16,309	17,010	17,010	17,180	17,641	17,827
Oil	11,959	12,119	12,013	12,863	13,323	13,530	13,759	14,165	14,389	14,552
Wool	328	329	342	308	415	432	432	438	452	504
Total	28,095	29,097	30,010	30,576	31,490	32,090	32,839	33,484	34,656	36,285

**Federal Railways.**—As noted in the introduction, efforts have been made to secure the participation of private capital in railway construction in India under what are called the branch line terms. In 1910 more liberal terms were offered for this purpose, and private capital was offered two alternative forms of assistance—

(1) A rate paid by the parent line from its net earnings from traffic brought to it by the feeder railway, sufficient to make up 5 per cent on the paid up capital of the branch line company. The liability of the main line began, however, limited to the total of the net earnings from this traffic.

(2) A firm guarantee from Government of a 2½ per cent return on the paid up capital. In

schedule were financed after its outbreak—fact which testifies to the popularity of Compamies floated under the Branch Line terms. Additional evidence of this popularity is furnished by the fact that apart from the schemes for which negotiations have actually been granted, there were under negotiation at the close of the year 1914-15 proposals for the construction of 2,376 miles of railway on the 2-6-0 gauge, 649 miles on the metre-gauge, and 570 miles on the broad-gauge, or an aggregate of 3,595 miles of railway, involving a total capital outlay of nearly twenty crores of rupees, or upwards of thirteen millions sterling.

But however attractive the Branch Line terms of 1913 may have proved in respect of the better developed provinces of India, it was recognised that in Assam, owing to the undeveloped state of the country, further inducements than those held out by the Branch Line terms were necessary if private capital was to be attracted to railway projects. It was accordingly decided that special terms should be offered for the construction of railways in that province and a Resolution was issued in January 1915 which permitted the grant for a limited number of years after opening of a railway to traffic, of a provincial subsidy of 1 per cent by the Assam Administration in addition to the Imperial guarantee of 3½ per cent. The number of proposals for the construction of feeder lines in Assam, which have been put forward since the publication of this Resolution, shows that the value of this additional concession is fully appreciated by the public.

**District Boards**—The part taken by the District Boards of the Madras Presidency in the development of railway communications in 1884, District Boards in Madras have been empowered to levy a special cess not exceeding 3 pies per rupee of land revenue,—the proceeds of this cess being reserved for the construction of feeder railways intended to develop the districts which finance and own them.

The Tanjore and Kistna District Board Railways so constructed, but recently the example of those Boards have been followed in several other parts of the Presidency. During the year under review, the following lines were under construction at the cost of local funds—

- (1) Podanur-Pollachi (3-3½) by the District Board of Coimbatore, 25 miles in length and estimated to cost Rs 11½ lakhs
- (2) Tenali-Bepalli Railway (5-6½) by the District Board of Guntur, 23 miles in length and estimated at Rs 14 lakhs
- (3) Madanagalam-Mannargudi and Tiruturai-Vedareddi-Mannargudi and Tiruturai by the Tanjore District Board, having a combined mileage of 31½ and being estimated to cost approximately Rs 20 lakhs

For various reasons, no new District Board Railways were actually sanctioned during the year, but at its close negotiations were in progress in connection with a number of important schemes, which it was hoped would shortly materialise.

To encourage District Board enterprise in other parts of India, permission to legislate during 1913 to all Local Governments desiring to introduce such legislation, but it will probably be some years before any of the Local Boards in these provinces have accumulated sufficient funds to commence the construction of branch railways.

**Accidents**—The total number of persons of all classes killed by motor boys and their control was 76 against 117 and the number of a total of 151.09 millions against 160.02 millions of passengers travelling, and of 16,012 58 millions of miles travelled, 16 passengers were killed and 110 injured against 58 killed and 104 injured in the previous year. This gives an average of one fatal casualty in 28.10 millions against one in 8.04 millions of persons travelling and in average of one in 1,001.13 millions against one in 260.142 millions of miles travelled in 1914-15 and 1913-14 respectively. This diminution in the number of fatalities cannot, however, be attributed to any decrease in the number of accidents. In the previous year an unusually large number of persons were killed 2 accidents alone causing the death of 56 persons.

The following are particulars of the more serious train accidents—

A passenger train running through Sambaru station on the North-Western Railway, on the 20th November 1914, was pulled up by the driver in order to obtain permission to proceed to the next station. This "permit" should have been in the pouch which is picked up mechanically by the engine when a train does not stop at a station, but was missing on this occasion. After some delay caused by the Assistant Station Master making a second "permit" the train was backed and drawn up about the centre of the station, and while standing on this position was run into from behind by a mail train which was following. Three vehicles were wrecked and 8 persons killed and 25 injured by the collision.

The case was the subject of departmental enquiry as a result of which the Assistant Station Master in connection of the rules and so allowing that train to enter the station before the line on which it was to be received was clear. The Assistant Station Master was subsequently prosecuted, convicted and sentenced to 2 years' imprisonment and a fine of Rs 200.

A goods train while ascending the gradient passing through a tunnel near Igaripatti station on the Great Indian Peninsula Railway on the 15th October 1914, parted between the 2nd and 3rd vehicles from the leading engine and the rear portion ran back towards the Igaripatti station where it collided with a down goods train standing outside the station, owing to the points leading to No. 3 station, which is provided for such a contingency, being held over by the pointsman for the down main line, instead of being allowed to remain in their normal position for the catch.

Երևանի քաղաքապետարանի քաղաքականության և հասարակական կյանքի վարչության ղեկավար Գևորգ Բաբայանը հայտարարեց, որ քաղաքապետարանը պատրաստ է օգնել քաղաքացիներին, որոնք ցանկանում են օգտագործել իրենց հատկությունները և օգնել քաղաքին:

The Leyton Boat Mail collided with a goods special near Samardam station on the South Indian Railway, on the 26th May 1914. An employee of the Railway, who was travelling in the rear brake-van of the goods train, was slightly injured but the damage to rolling stock especially in the case of the goods train was considerable.

A storm the night before had blown down trees which had damaged the wires connecting the clock instruments. This had necessitated the suspension of the ordinary method of working on the Absolute Block System and resort to the working of trains under special rules and arrangements framed by the Railway Board.

[illegible]

in investigating the cause of the accident it was found that the rules and regulations framed by the Company for the working of trains during the failure of telegraphic communication and much to the discretion of the staff, and was consequently decided to revise the rules the staff at fault were dealt with department-

Early on the morning of the 20th November 1914, a "glancing" collision occurred at Korukuppetai, a small station on the Madras and Southern Mahratta Railway, in the outskirts of Madras.

Two goods trains had to cross at this place. The up train arrived first and entered the loop. The down train was then received on the siding. The line was a long trial and was a hard and dangerous place to pass.

The fact of the points being drawn fully clear of the points of collision is clearly shown by the diagram. The fact of the engine having been stopped at the points is clearly shown by the fact that the engine collided with the rear of the train and derailed the last three wheels.

The Assistant Station Master who was, in a recent measure, responsible for the accident, was found dead under one of the wagons. The responsible, was prosecuted and sentenced to pay fine of Rs 150, or in default, to undergo three months rigorous imprisonment.

**Railway Staff**—The total number of servants in railway employ at the close of the year was 600,116, of which number 7,640 were Europeans, 10,845 Anglo-Indians, and 582,131 Indians. Of the Europeans and Anglo-Indians, 9,81 were enrolled as Volunteers at the close of 1914-15, there were 10,664 children and 1,168 apprentices in Railway Schools.

Light Housekeepers are Bill and

7. On one occasion, when the train was filled with automatic vacuum brakes, considerable trouble had been experienced in handling the train up the gradient owing to the engine not starting.

[illegible]

An up Barabont Pilot collided with a down Barabont Pilot between Onal and Sonachora April 1914, resulting in the death of three railway servants including the driver who was primarily responsible for the accident, and injured to eight other railway servants. The killing stock was also considerably damaged. The accident was due to the driver of the down Barabont Pilot having started with a wrong line clear. The Assistant Station Master of Sonachora was also responsible for the accident inasmuch as he failed to give proper instructions as to the train for which the line clear was in-terpreted, or to ensure that his instructions were fully understood and properly carried out, as required by the rules.

The accident would have been averted, had the Assistant Station Master sent immediate warning to Onal Junction cabin when he discovered that the down Barabond Ploie had left with a wrong line clear. The staff at fault were departmentally punished.

On the last day 1913, two white class carriages for us up and down the line were caught between Shebdale and Maltby stations, on the Poona Branch of the Midland and Southern Railway. The train was brought to a stand and it was found that an Indian woman had a child, who had snuggled herself up in the lavatory in the front carriage and been burnt to death, and that out-

It is believed that the cigarettes were set on fire by a lighted cigarette which was dropped by one of the passengers into a window slot at the bottom of the door. The current of air passing up the chimney helped to fan the flames and prevent similar accidents in future it has been suggested to Railway Administration.

## THE CHIEF RAILWAYS IN INDIA.

tion through Eastern Rajputana with Delhi. On the acquisition of the company in April 1907 the purchase price was fixed at £11,985,581. The statistical working of the broad gauge shows a mileage of 800.30, the capital outlay 2,111 lakhs, gross earnings 341 lakhs, net earnings 165 lakhs, percentage of net earnings on the capital outlay 6.76, gain to the State 15 lakhs.

The metro gauge system of the Company shows a mileage of 1,815.61, total capital outlay 1,710 lakhs, gross earnings 280 lakhs, net earnings, 132 lakhs, percentage of net earnings on the capital outlay 7.7, gain to the State 75 lakhs.

## Burma Railways

The Burma Railway is an isolated line, and although various routes have been surveyed with the railway system of India on account of the difficulty and sparsely populated country which intervenes. It was commenced as a State Railway and transferred in 1806 to a Company under a guarantee. The mileage is 1,411.85, total capital outlay Rs 1,772 lakhs, gross earnings 210 lakhs, net earnings 94 lakhs, percentage of net earnings on the capital outlay 5.34, gain to the State 21 lakhs. But extensions have a total mileage of 253.18

## Eastern Bengal

The Eastern Bengal State Railway was promoted under the original form of guarantee and was constructed on the broad gauge. The first portion of the line running to Calcutta over the Ganges was opened in 1862. In 1874 sanction was granted for the construction on the metro gauge of the Northern Bengal State Railway, which ran from the north bank of the Ganges to the foot of the Himalayas on the way to Darjeeling. These two portions of the line were amalgamated in 1884 into one State Railway. The open mileage is 1639.05, capital total outlay 3,501 lakhs, gross earnings 332 lakhs, net earnings 114 lakhs, percentage of net earnings on capital outlay 3.28 Loss to the State 18 lakhs

## The East Indian.

The East Indian Railway is one of the three railways sanctioned for construction as experimental lines under the old form of guarantee. The first section from Howrah to Fandua was opened in 1854 and at the time of the opening ran as far as Raniganj. It gives the only direct access to the port of Calcutta from North-east India and is consequently fed by all the large railway systems connected with it. In 1850 the Government purchased the line, paying the shareholders by annuities, but leased it again to the company to work under a contract which is terminable in 1919. The open mileage is 2,716.48 under construction 1,750.67, total 4,467.15. Total capital outlay (on 2,445 miles) Rs. 7,052 lakhs, gross earnings 1,055 lakhs, net earnings Rs 625 lakhs, percentage of net earnings on capital outlay 8.87 gain to the State 236 lakhs.

The Assam-Bengal Railway, which is constructed on the metro gauge, starts from Chittagong and runs through Burma Valley across the North Cachar Hills into Assam. It is worked under a limited guarantee by a company whose contract is terminable in 1921. The main line has an open mileage of 847.98. The total capital outlay is Rs 1,624 lakhs, gross earnings 68 lakhs, net earnings, 17 lakhs and the percentage of net earnings on the capital outlay 1.07. The loss to the State for 1914-15 was Rs. 34,01,928.

## Bengal and North-Western

The Bengal and North-Western Railway was constructed on the metro gauge system by a company without any Government assistance other than free land and was opened to traffic in 1885. The system was begun in 1874 as the Tinsukia State Railway. In 1890 the line was leased by Government to the Bengal and North-Western Railway. Since then extensive additions have been made in both sections. It is connected with the Rajputana and Eastern Bengal State Railway at Khatiahat and the Oudh and Rohilkhand Railway at Benares. The open mileage is 2,027.12 under construction or sanction 35.08, total 2,062.20. The total capital outlay amounts to Rs 991 lakhs, gross earnings 108 lakhs, net earnings Rs 65 lakhs and interest divided between the Government and Company Rs 68 lakhs, percentage of total net income on capital outlay 6.95. Tinsukia railway. Total capital outlay Rs 817 lakhs, gross earnings Rs 95 lakhs, net earnings Rs 58 lakhs, gain to the State Rs 26 lakhs, and percentage 0.72.

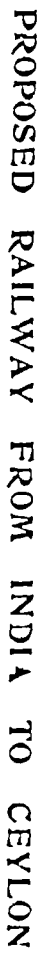
## Bengal-Nagpur

The Bengal-Nagpur Railway was commenced as a metro gauge from Nagpur to Chhattisgarh in the Central Provinces in 1887. A company was formed under a guarantee which took over the line, converted it to the broad gauge and extended it to Howrah, Cuttack and Ranchi. In 1901 a part of the East Coast State Railway from Cuttack to Vizagapatnam was transferred to it and in the same year sanction was given for an extension to the coal fields and for a connection with the Branch or the East Indian Railway at Haripur. Open mileage 2,727.85, under construction or sanction 283.23, total 3,011.08. The total capital outlay is Rs 4,021 lakhs, gross earnings Rs. 410 lakhs, net earnings 203 lakhs, percentage of net earnings on capital outlay is 5.05. The gain to the State is 47 lakhs.

## Bombay Baroda

The Bombay, Baroda and Central India Railway is one of the original guaranteed railways. It was commenced from Surat via Baroda to Ahmedabad, but was subsequently extended to Bombay. The original contract was terminable in 1880, but the period was extended to 1905, and then renewed under revised conditions. In 1885 the Rajputana metro gauge system of State railways was leased to the Company and has since been incorporated in it. On the opening of the Nagda-Munira, giving broad gauge connection







Arakan Yoma have to be crossed Yoma is a mountain ridge which extends from Cape Negrais northwards until it loses itself in a mass of tangled hills east of Akayab and Chittagong. At its southern end the height of the ridge is insignificant but it has peaks as high as 4,000 feet before it reaches the middle of Sandway and further north it rises much higher. It is a formidable obstacle to railway communication between India and Burma. This route is estimated to cost about £7,000,000 and would have to be supplemented by branch lines to Akayab where there is at present a considerable rice traffic and the cost of this would have to be added to the £7,000,000 already incurred to The other routes examined have been the Iukong Valley route and the Manipur route which were surveyed by the late Mr R. A. Way many years ago. The Manipur route is estimated to cost about £3,000,000 as it has to cross three main ranges of hills with summit levels of 2,450, 3,600 and 8,900 feet long. Altogether there would be about four miles of tunnelling through the three main ridges and through other hills and more than 100 miles of expensive undulating railway with grades as steep as 1 in 50 and 11,000 feet of aggregate rise and fall. The Iukong valley route seems to be the cheapest one as it is estimated to cost £3,500,000. This line is only about 284 miles long and it presents fewer engineering difficulties than either the Coast or the Manipur route. One hundred and fifty miles of this route lie in open country capable of cultivation though at present it is only very thinly populated. Only one range of hills has to be crossed and this can be negotiated at a summit tunnel of 5,000 feet long at a height of 2,500 feet. There are less than fifty miles of very heavy work and only about 4,500 ft aggregate of rise and fall.

Later in the year, when severe economies had to be practised, and it was clear that funds would not be available for the purposes of the railway, the survey parties were withdrawn.

The rising of the Indian in the Bay of Bengal in 1914, and the temporary interruption of communications between India and Burma, stimulated the demand for a direct railway connection between India and Burma. Government accepted the position and appointed Mr Richards, M. Inst C E, to be the engineer-in-charge of the surveys to determine the best route for a railway from India to Burma. The coast route appears to be the favoured one. This would start from Chittagong, which is the terminus and head-quarters of the Assam-Bengal Railway and a seaport for the produce of Assam. The route runs southwards through the Chittagong district, a land of fertile rice fields intersected by big rivers and tidal creeks and it crosses the Indo-Burma frontier, 91 miles from the town of Chittagong. For about 160 miles further it chiefly runs through the fertile rice lands of Arrakan and crosses all the big tidal rivers of the Akayab delta. These include the Kaladan river which drains 4,700 miles of country and even at a distance of about 30 miles from its mouth is more than half a mile wide. About 260 miles from Chittagong the railway would run into the region of mangrove swamps which fringe the sea coast north and south of the harbour of Kawkaphu stretching out into the mangrove swamps like ribs from the backbone. Innumerable spurs of the

### Indo-Burma Connection

will be laid at that level. The sinking of the piles and slabs will be done by means of water jets. This case-way, it is expected, will cause the suspended and brought up by the current, to settle on either side bringing about rapid accretion and eventually making one big island of Rameswaram island and Manar island. If this method of construction is adopted, it is estimated that the total cost of the causeway and works at the two terminal points, viz — Dhanushkott and Talaimannar will be approximately 111 lakhs.





## Main results of working of all Indian Railways treated as one system

Particulars	1907	1908	1909	1910	1911	1912	1913-14	1914-15
16 Goods train-miles (In thousands) Train-Miles	46,809	44,875	44,065	47,600	53,210	59,002	57,033	56,359
17 Mixed train-miles (In thousands) "	30,142	29,944	30,850	31,986	33,746	34,940	34,581	35,514
18 Total, including miscellaneous train-miles (In thousands) "	124,786	127,881	128,300	132,823	142,944	152,701	156,276	157,142
19 Unit-mileage of passengers (In thousands) Unit-miles	11,840,040	12,102,920	12,304,570	13,432,477	14,372,943	15,318,872	16,614,098	16,022,840
20 Freight ton-mileage of goods (In thousands) Ton-miles	10,840,885	9,925,830	9,310,441	12,002,016	13,358,204	15,028,505	15,623,235	15,225,057
21 Average miles a ton of goods was carried Miles	174 58	150 07	153 37	184 33	187 44	190 15	182 11	166 04
22 Average rate charged for carrying 4-ton of goods one mile Pies	5 18	5 00	5 76	4 83	4 73	4 06	4 64	4 43
<i>Average miles a passenger was carried</i>								
23 1st class Miles	100 80	100 70	103 35	99 72	111 00	106 54	112 46	123 88
24 2nd class "	70 01	71 26	69 24	75 07	76 33	74 77	74 58	80 04
25 Intermediate class "	59 20	58 82	54 89	52 41	57 27	51 00	51 13	40 72
26 3rd class "	30 65	38 65	38 74	37 12	37 72	37 81	37 40	36 50
27 Season and Vendors' tickets "	0 31	8 04	8 80	8 70	8 78	8 04	8 71	8 24
28 Total "	38 71	37 08	37 54	36 15	36 87	36 72	36 30	35 52
<i>Average rate charged per passenger per mile</i>								
29 1st class Pies	13 06	12 05	12 80	14 55	14 20	14 25	14 48	12 79
30 2nd class "	5 76	5 70	5 94	6 07	6 73	6 04	6 00	6 28
31 Intermediate class "	3 06	3 04	3 06	3 16	3 10	3 12	3 14	3 16
32 3rd class "	2 28	2 28	2 28	2 28	2 30	2 30	2 20	2 20
33 Season and Vendors' tickets "	1 40	1 30	1 42	1 42	1 43	1 45	1 42	1 42
34 Total "	2 44	2 44	2 43	2 45	2 47	2 45	2 45	2 44

### Challenge of Rajasthan Issues in India open for Traffic at end of year

	1901	1904	1905	1906	1907	1908	1909	1910	1911	1912
STATISTICS										
Agri Delhi Chert*	770	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Assam Bengal*	125	125	125	125	125	125	125	125	125	125
Bamun Bahal*	1,082	1,080	1,080	1,080	1,080	1,080	1,080	1,080	1,080	1,080
Bengal Central	21	21	21	21	21	21	21	21	21	21
Bengal-Nagpur*	13	13	13	13	13	13	13	13	13	13
Berwada Division*	504	504	504	504	504	504	504	504	504	504
Bhopal-Nars*	1,337	1,340	1,340	1,340	1,340	1,340	1,340	1,340	1,340	1,340
Bombay, Baroda & Central India*	80	80	80	80	80	80	80	80	80	80
Burma*	1,035	1,033	1,033	1,033	1,033	1,033	1,033	1,033	1,033	1,033
Campana-Burmal	877	871	871	871	871	871	871	871	871	871
Dhoke-Kurnool*	1,562	1,562	1,562	1,562	1,562	1,562	1,562	1,562	1,562	1,562
Eastern Bengal	805	805	805	805	805	805	805	805	805	805
Gondal-Chand*	124	124	124	124	124	124	124	124	124	124
Great Indian Peninsula*	30	30	30	30	30	30	30	30	30	30
Indian Midland*	77	77	77	77	77	77	77	77	77	77
Kodhup-Kydetal*	60	60	60	60	60	60	60	60	60	60
Korhat-Provincial State	92	92	92	92	92	92	92	92	92	92
Kabha-Sinda	237	237	237	237	237	237	237	237	237	237
Kohat-Thal	2,550	2,550	2,550	2,550	2,550	2,550	2,550	2,550	2,550	2,550
Lachnow-Bareilly*	200	200	200	200	200	200	200	200	200	200
Madrass and Southern Mahratta*	17	17	17	17	17	17	17	17	17	17
Montpur Dharmapur*	3,130	3,102	3,275	3,378	3,440	3,463	3,508	3,570	3,650	3,650
Mysore*	40	40	40	40	40	40	40	40	40	40
Nagda-Mattra*	1,101	1,158	1,105	1,213	1,223	1,223	1,231	1,237	1,237	1,237
Nagpur Chhindwara*	17	17	17	17	17	17	17	17	17	17
Nagpur*	60	60	60	60	60	60	60	60	60	60
North-Western	1,082	1,082	1,082	1,082	1,082	1,082	1,082	1,082	1,082	1,082
North-Western-Durgal	1,123	1,123	1,123	1,123	1,123	1,123	1,123	1,123	1,123	1,123
Oudh and Rohilkhand	60	60	60	60	60	60	60	60	60	60
Palampur-Deesa*	517	517	517	517	517	517	517	517	517	517
Purulia-Banchi*	1,082	1,082	1,082	1,082	1,082	1,082	1,082	1,082	1,082	1,082
Rampur-Dhantari*	1,123	1,123	1,123	1,123	1,123	1,123	1,123	1,123	1,123	1,123
Rajputana-Malwa*	60	60	60	60	60	60	60	60	60	60
Rajputana-Malwa*	1,082	1,082	1,082	1,082	1,082	1,082	1,082	1,082	1,082	1,082
Southern Siam States	1,123	1,123	1,123	1,123	1,123	1,123	1,123	1,123	1,123	1,123
Thamely-guion*	60	60	60	60	60	60	60	60	60	60
Thimboot*	517	517	517	517	517	517	517	517	517	517
Thirupattur-Krishnagiri*	60	60	60	60	60	60	60	60	60	60
Total	21,131	21,574	22,082	22,693	23,200	23,693	24,198	24,665	25,132	25,599

Worked by a Company. † Amalgamated with Eastern Bengal Railway.  
‡ Amalgamated with Bombay, Baroda and Central India Railway.  
§ These are the latest figures published in 1915.

† Mileage of Railway Lines in India open for Traffic at end of year—continued

Railways	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912.
ASSISTED COMPANIES										
Ahmedabad-Dholka . . . . .	33	33	33	33	33	33	33	33	33	33
Ahmedabad-Taranali . . . . .	65	65	65	65	65	65	65	65	80	80
Amritsar-Patiala . . . . .	..	..	..	28	28	28	28	64	64	64
Arrah-Sasaram Light . . . . .	18	18	18	18	18	18	28	28	33	33
Bakhtepur-Bihar Light . . . . .	..	..	20	20	20	26	35	61	61	61
Barneset-Basirhat Light . . . . .	..	22	22	28	79	70	70	70	116	110
Barisal Light . . . . .	..	..	..	032	1,016	1,017	1,092	1,117	1,176	1,177
Bengal and North Western . . . . .	831	871	904	163	163	153	153	153	153	1,177
Bengal Doonars . . . . .	163	163	163	163	163	40	62	62	62	62
Bezwa-de-Masulpalam . . . . .	..	..	..	..	..	..	..	..	..	..
Champaner-Shivrajpur Light . . . . .	..	..	..	..	..	..	..	..	..	..
Darjeeling-Himalayan . . . . .	61	61	61	61	61	61	61	61	61	61
Delhi-Umballa-Kalka . . . . .	102	102	102	102	102	102	102	102	102	102
Deogarh . . . . .	6	6	6	6	6	6	6	6	80	80
Dibru-Gadga . . . . .	78	78	78	78	78	78	78	80	80	80
Hardwar-Dehra . . . . .	32	32	32	32	32	32	32	32	32	32
Howrah-Armita . . . . .	20	37	37	37	37	44	44	44	44	44
Howrah-Shearkhan . . . . .	..	20	20	20	20	20	20	20	20	20
Jalandhar Doab . . . . .	..	..	..	..	..	..	..	..	..	..
Malheran . . . . .	..	..	..	..	13	13	13	13	13	13
Mirpur Khas-Jhudo . . . . .	..	..	..	..	..	..	..	..	..	..
Mirpur Khas-Khadro . . . . .	..	..	..	..	..	..	..	..	..	..
Myenamhigh-Jamunpur-Jagannabganj . . . . .	63	61	61	63	54	64	64	55	55	55
Powayan Light . . . . .	40	40	40	40	10	40	40	40	40	40
Rohilkhand and Kumaon . . . . .	64	61	64	118	171	203	202	202	225	256
Shahdara (Delhi) Saharanpur Light . . . . .	..	..	..	..	..	..	..	..	..	..
South Bihar . . . . .	79	79	79	79	93	93	93	93	93	93
Southern Punjab . . . . .	425	425	502	680	576	675	675	670	676	670
Subei Valley . . . . .	..	..	..	..	..	..	..	..	..	..
Tanjore Platelet Board* . . . . .	90	90	90	103	103	103	103	103	103	103
Tapti Valley . . . . .	166	155	165	165	165	153	155	153	165	165
Tarakesur . . . . .	22	22	22	22	22	22	22	22	22	22
Tezpur-Ballpara . . . . .	20	20	20	20	20	20	20	20	20	20
Zharon-Duyinzak Light . . . . .	8	8	8	8	8	..	..	..	..	..
Total	2,444	2,430	2,620	2,887	3,117	3,207	3,353	3,660	3,903	4,013

Railway Mileage.

\* Worked by a Company

† Amalgamated with East Indian Railway

‡ These are the latest figures published in 1915

† Mileage of Railway Lines in India open for Traffic at end of year—m. f.

Railways	1901	1904	1905	1906	1907	1908	1909	1910	1911	Total
<b>UNASSISTED COMPANIES</b>										
Dehr-Rohtas Light										
Jagadhri Light	11	0	0	0	0	0	0	0	11	11
Leedo and Pakk Warburton Colliery										
Madaya Light	31	33	34	33	33	34	33	33	31	31
Yamkshetra Nagra Light										
<b>Total</b>	12	43	12	42	42	12	33	33	33	72
<b>NATIVE STATE RAILS</b>										
Bhavnagar Gondal Junagadh-Verdandar	331	331	331	331	331	333	333	371	1331	1731
Bhavnagar	44	44	44	44	44	44	44	44	44	44
Bhopal Karsel*	113	113	113	113	113	113	113	113	113	113
Bhopal Ujjain*	140	140	140	140	140	140	140	140	140	140
Bina-Gooma-Barnan*	38	38	38	38	38	38	38	38	38	38
Birat Shikhar*	31	34	33	34	34	34	34	37	37	37
Cooch-Bihar										
Cutch										
Dholpur-Bari										
Dharmadun	21	21	21	21	21	21	21	21	21	21
Gaekwar's Dabhol*	50	55	54	54	54	54	54	54	54	54
Gaekwar's Malsama*	93	93	93	93	93	130	138	138	138	138
Gondal-Verdandar										
Gwalior Light*	127	184	184	184	184	203	250	250	250	250
Hindupur*	51	51	51	51	51	51	51	51	51	51
Hingoli Branch*										
Hyderabad Godavari Valley*	301	301	301	301	301	301	301	301	301	301
Jadpur*										
Junnu and Keshnulpur	10	10	10	10	10	10	10	10	10	10
Junagar	54	54	54	54	54	54	54	54	54	54
Jetalsar-Rathod	46	46	46	46	46	46	46	46	46	46
Jodhpur-Bikaner	700	700	700	700	700	700	776	831	910	905

\* Worked by a Company

† These are the latest figures published in 1915

† Mileage of Railway Lines in India open for Traffic at end of year—concluded

Railways	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912
NATIVE STATE LINES— <i>could</i>										
Junagad									80†	101
Khapur-Chachran*	10	10	10	10	10	10	10	10	22	22
Kolar Gold Fields*	29	29	29	29	29	29	29	29	10	10
Kolhapur*	79	79	79	79	70	70	70	79	29	29
Kosamba-Zankhyav	04	94	04	04	32	03	03	93	79	79
Ludhiana-Dhuri-Jahhal									93	93
Morvi									32	32
Mourbhany*										
Mysore-Nanjangud*	16	16	16	16	16	16	16	16	16	16
Nagda-Ujjain*	34	34	34	34	34	34	34	34	34	34
Nizam's*	330	330	330	330	330	330	330	330	330	330
Parakimedi Light*	25	25	25	25	25	25	25	25	25	25
Pelad-Cambay*	32	32	32	32	34	34	34	10	16	25
Pipar Road-Bahvi Light										
Rajputa*	37	37	37	37	37	37	37	37	37	37
Rajputra-Bhatina	107	107	107	107	107	107	107	107	107	108
Saangli*	05	65	65	65	65	65	65	65	65	65
Shoranur-Cochin*	07	67	67	67	67	67	67	67	58	58
Thanevelly-Qulion	42	42	42	42	42	42	42	42	42	46
Udaipur-Chitorgarh										
Vijapur-Kaloi-Kadi*										
Total	3,205	3,385	3,468	3,471	3,517	3,620	3,742	3,852	3,974	4,108
FOREIGN LINES										
Kanakkal-Periam*	15	15	15	15	15	15	15	15	15	15
Pondicherry*	8	8	8	8	8	8	8	8	8	8
West of India Portuguese*	51	51	51	51	51	51	51	51	51	51
Total	74	74	74	74	74	74	74	74	74	74
Grand Total	20,956	27,505	28,205	29,007	30,010	30,576	31,490	32,099	32,839	33,484

\* Worked by a Company.

† Formerly worked as part of the Dhavanager-Gondal-Junagad-Forbandar Railway.  
† These are the latest figures published in 1915

# Irrigation.

should be constructed through direct agency, and should be constructed by the State from loan funds as productive public works.

## The British Inheritance.

The British Government in India inherited a few major irrigation works. One of these was the Grand Anicut—the local term for barrage—stretching across the width of the Cauvery river in Madras. In the Punjab there were a normal bed of the river and fed from the flood current—constructed by the Muhammadan and Sikh rulers, and owing to its proximity to Delhi, the waters of the Jumna were brought to the neighbourhood of the city by the Mughals. It is doubtful if these works ever irrigated any considerable areas or conferred much benefit on the people but they suggested the model on which the British engineers worked. In Southern India, Sir Arthur Cotton constituted the upper Anicut across the Coleroon river, so as to secure the full local rainfall for the utilisation of the Grand Anicut across the Cauvery. He also designed the works which, constructed and improved at an outlay of three crores, irrigate more than two million acres in the Godavari and Krishna deltas. In Northern India Sir Probyn Cautley constructed the great Ganges Canal, which takes off from the river near Hardwar, and which in magnitude and boldness of design has not been surpassed by any irrigation work in India or elsewhere. In this way were laid the foundations of the irrigation system in India. The work was gradually pushed forward in Northern India a great system of canals was constructed, chiefly in the Punjab and the United Provinces. Some of these, like the great Chenab Canal, ought to be classed amongst the wonders of the world. It irrigates nearly two million acres, or about two-fifths of the cultivable area in Egypt, with an ordinary discharge of eleven thousand cubic feet per second, or about six times that of the Thames at Tiddington. The Chenab and the Jhelum Canals brought under irrigation, great areas of Government waste, and thereby allowed the system of State colonisation, which relieved the congestion on the older villages of the Punjab, and established colonies of over one million of people on what had been the desolate abode of a handful of nomads. In the Bombay Deccan a few protective works were constructed, like Lake Eble and Lake Whitting, drawing their supplies from the Ghats and spilling them over the arid tracts of the Deccan. In Madras there was completed the bold and most imaginative irrigation work in the world, by the device of constructing a reservoir at Periyar, on the outer slopes of the ghats, and carrying the water by means of a tunnel through the intervening hills. The Madras Government turned the river back on its watershed and poured its waters over fertile lands starved by want of moisture. But the Deccan works did not pay. The cultivation would not use the water in years of good seasons of drought, the inevitable result of such rainfall, and there was not enough to go far in the rainy season. The Government was to concentrate attention upon the river and to leave protective irrigation to the farmer, and to leave for want of funds

will for want of funds

## Its Early History.

It is a natural in such conditions, that irrigation in India should have been practised from time immemorial. In the history and imagery of the "Ramayana" there are many allusions to the use of water for irrigation. The practice of the people of India dates back to many years before the Christian era, there are many references to the practice of irrigation. Well have been in the practice of irrigation, most of the innumerable tanks in Southern India have been in use for many generations, the practice of drawing off the flood waters of the Indus and its tributaries by means of small inundation canals has been followed from a very early date, and in the submontane districts of Northern India are still to be found the remains of ancient irrigation channels, which have been buried for centuries in the undergrowth of the forests. But in the direction of constructing large and extensive works for the utilisation of the surplus waters of the great river little was done before the advent of British rule, and they are comparatively of recent date.

## The State Interference.

Irrigation works in India may be divided into three main heads—wells, tanks and canals. The first class and the most impressive are the canals, and these may attract attention first, because they constitute one of the most enduring monuments to British rule. They have in British India been constructed by direct State agency. In the early days of modern irrigation certain works in the Madras Presidency were carried out by a guaranteed company, and the Oress canal project was commenced through the same agency. Both Companies fell into difficulties, and the system into disrepair, during the viceregency of Lord Lawrence it was decided that all irrigation works which promised a reasonable return on the capital expenditure

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Class of Work		Capital Outlay to and of 1900-01	Interest charges at 1 per cent on Capital Outlay	Net Revenue in 1900-01 of Lakhs	Net Revenue less charges for Lakhs of Rupees
Total	Major Works for which capital accounts have been kept	36,63.72	116.53	250.70	113.15
	Other Minor Works	320.04	12.80	19.18	0.38
		39,83.76	150.33	360.73	87.87
					207.40

State of Georgia, County of DeKalb, ss. I, \_\_\_\_\_, Clerk of the Superior Court, do hereby certify that the foregoing is a true and correct copy of the original as the same appears in the records of the Court.

## The Commission's Programme

The Commission reported that the aid for the construction of new works of any magnitude on which the net revenue would exceed the interest charges was limited, being restricted to the Punjab and parts of Alwaras—tracts for the most part not liable to famine. They recommended that works of this class should be constructed as far as possible, not only because they would be profitable investments, but also because they would increase the food supply of the country. Then addressing themselves to the question of famine protection, they worked out a very interesting equation. Taking the district of Sholapur, in the Bombay Deccan, perhaps the most famine susceptible district in India, they calculated that the cost of famine tags which might be attributed to them.

## The New Policy

The principal effect of the Irrigation Commission's report was to substitute policy for sporadic effort, and the progress since made has been remarkable. The action taken on the recommendation of the Commission is thus summarised by the Government of India in their last annual review —

### Punjab Triple Project.—In the

**Punjab Triple Project.**—In the year 1961 a project was submitted to the Government of India for the irrigation of the lower Bari Doab by means of a canal taking out of the Sutlej river. It was suggested to the Irrigation Commission that it would be more advantageous to carry out this work as an adjunct of a more comprehensive scheme for the irrigation of the Jech and Rechna and lower Bari doabs. This scheme relied on the possibility of utilizing

The Commission reported that the field for the construction of new works of any magnitude on which the net revenue would exceed the interest charges was limited, being restricted to the Punjab, Sind and parts of Madras—tracts for the most part not liable to famine. They recommended that works of this class should be constituted as fast as possible, not only because they would be profitable investments, but also because they would increase the food supply of the country. Then addressing themselves to the question of famine prevention, they worked out a very interesting equation. Taking the district of Sholapur, in the Bombay Deccan, perhaps the most famine susceptible district in India, they calculated that the cost of famine relief in it was 5 lakhs of rupees a year. From this deduction, and making allowance for the advantage of famine avoidance as compared with famine relief, they said that the State was justified in protecting the land in such a district at a cost of 221 rupees per acre. For the general protection of the Bombay Deccan lakes in the Ghat, where the rainfall has never been known to fall even in the driest years. For Madras they recommended the investigation of the old Tungabhadra project, and of a scheme for storage work on the Krishna. They proposed that Government should undertake the construction of protective works for the rice-growing districts of the Central Provinces and the Ken Canal project in Bundelkhand. The Commission further sketched out a rough programme of new major works to be constituted in different



**Bombay Decan**—The Chanhaput project has been finished, the Godavari canals are approaching completion, while work on the Pravara project is in progress. The Alwar Right Bank canal project was sanctioned and completed in 1912. In respect of size and cost it is the most important irrigation work of the protective class undertaken in India. The work involves the enlargement of the reservoir on Lake Whiting, which feeds the existing left bank canal, so that the capacity of the reservoir will be increased from 6,800 to 24,000 million cubic feet. A canal 109 miles long will be constructed and the waters will be distributed by 1 branches and 63 distributaries. The work, which is estimated to cost 257 lakhs of rupees and to occupy eleven years in completion, will afford protection to a tract in the Sholapur district which has the reputation of being one of the most fertile to famine in the whole of India. Another important protective scheme the Gobari canal has recently been sanctioned by the Secretary of State. It comprises the protection of some 193,000 acres in the Bijapur and Belgaum districts in British territory and in the Native States of Kolhapur, Nanded, Junnar, Sangli and Kurnulwad at a cost of Rs. 197 lakhs.

**Madras**—The Commission recommended the investigation of three very important works for this province, viz., the Tungabhadra project, and the Krishna and the Cauvery Reservoir projects. Detailed investigations have shown that these could be carried out except at prohibitive cost and the project has accordingly been abandoned. The other two promises to prove productive. The plans and estimates of the Cauvery project, which will involve the construction of the largest dam of its kind in the world, have been approved by the principal advisers of the Government of India. The consideration of the project cannot, however, be further proceeded with until a settlement has been arrived at in respect of the claims of the Mysore Durbar in the waters of the Cauvery River. Plans and estimates for the Krishna Reservoir project have also been prepared and are being revised in the light of certain suggestions made by the Inspector General of Irrigation in India. A project to reclaim Divi Island, a fertile deltaic tract at the mouth of the Kistna, by means of flood banks and to irrigate this area by a pumping installation, which was approved by the Irrigation Commission, has been carried out. The work is now in operation.

**United Provinces**—The Commission delineated in rough outline a project for the utilization of the waters of the Gomti river in Oudh for supplementing the supplies of canal systems which derive their water from the Ganges and Jumna rivers. The proposals were thoroughly investigated, and a project estimated to cost some 40 crores was prepared on the lines suggested by the Commission. In view of certain difficulties inherent in this scheme the Government of the United Provinces has drawn up an alternative protective project, estimated to cost Rs. 380 lakhs, which is now engaging consideration. The Commission recommended the investigation of canals from the rivers flowing through Bundelkhand, and the Mirzapur and Allahabad and it is being further investigated by the Secretary of the technical advisers of the State and it is being further investigated by the Secretary of the technical advisers of the State and it is being further investigated by the Secretary of the technical advisers of the State.

**Sind Sagar Canal**—The Irrigation Commission should be convinced into a store for the purpose of augmenting the water supply of the Indus project. This project was not dropped in 1905, because the Government of India were advised that the canal would not require more water than was already available in the rivers from which the canals derived their supply. It has since been found, however, that the dredging operations, by the way of the Indus river at certain periods, will consequently become necessary to construct a dam across the stream in order to give an adequate supply of water to the several systems dependent on the cold weather supply of the river and the Government of India have recently ordered the preparation of a project for this purpose.

**Sutlej Valley Project**—The Commission drew attention to the possibility of increasing the water in the Sutlej valley by the construction of weirs on the rivers as to give a more assured and regular supply of water in all seasons to the existing irrigation canals in that tract. Subsequent investigations have shown that a which the Native States of Bahawalpur and Uchialpur would also benefit. A preliminary project is now under investigation.

**Sind**—The question of converting the network of inundation canals in Sind into perennial channels by means of weirs across the river Indus has been considered at various intervals during the past 60 years. As a result of the investigations that were made a scheme was drawn up for the construction, at a cost of some 17 crores, of a barrage at Sukkur with a canal on the left bank which would have been the largest irrigation channel in India. The project as drawn up did not meet with the approval of the technical advisers of the State and it is being further investigated by the Secretary of the technical advisers of the State and it is being further investigated by the Secretary of the technical advisers of the State.

**Woolar Lake Storage**—It was suggested that the Woolar lake in the Nizam's State should be converted into a store for the purpose of augmenting the water supply of the Indus project. This project was not dropped in 1905, because the Government of India were advised that the canal would not require more water than was already available in the rivers from which the canals derived their supply. It has since been found, however, that the dredging operations, by the way of the Indus river at certain periods, will consequently become necessary to construct a dam across the stream in order to give an adequate supply of water to the several systems dependent on the cold weather supply of the river and the Government of India have recently ordered the preparation of a project for this purpose.

## Results of Irrigation Policy

bad Districts. The investigations have resulted in the execution of the Ken and Dhasan canals, the Lunkwan Reservoir project, and many other smaller schemes. The result is that the Trans-Jumna Districts of these Provinces which were previously so liable to famine, are now fairly well protected.

**Central Provinces**—A number of small but very useful tanks designed to protect precarious tracts from famine have come into existence as a result of the measures taken on the Commission's recommendation. In addition, three large canal systems known as the 'Gendua', the 'Weinganga' and the 'Mahamud' canals, which will derive their supplies from the rivers after which they have been named, have been sanctioned. The last named has already come into operation.

## Results of the New Policy

We can now turn to the results of this activity. The following table shows the results of the activities of the period mentioned. In the following table the areas are in millions of acres and the amounts in millions of pounds sterling.

The average capital outlay for the triennium 1908-11 was £31,191,253. After meeting all the charges for maintaining and operating the works, and also all interest charges, the net profit which accrued to Government during the twenty-four years ending with 1910-11 was £33,087,833, and this more than repaid the entire capital outlay on the works in operation from the commencement of British rule up to the end of the period mentioned. In the following table the areas are in millions of acres and the amounts in millions of pounds sterling.

Triennium	Capital Outlay	Area	Value of Crops	Direct Profit to Government	Percentage of Net Revenue Outlay
1908-11	31 40	22 10	51 71	2 28	10 76
1905-08	30 32	21 88	48 25	2 03	10 44
1902-05	28 78	20 08	43 66	1 68	9 71
1899-02	26 66	19 06	39 67	1 53	9 68
1896-99	25 01	17 65	37 40	1 53	10 09
1893-96	22 04	14 49	29 88	1 03	8 25
1890-93	21 62	13 85	26 87	0 83	7 60
1887-90	20 42	13 16	24 33	0 76	7 51

The results for the last year when figures are available (1913-14) are given in a subsequent page. The following striking table shows them for the latest triennium —

Capital Outlay (Direct and Indirect) to end of Year	Gross Receipts	Working Expenses	Net Receipts	Percentage of Net Receipts on Capital Outlay	Area Irrigated
---	----------------	------------------	--------------	--	----------------

Major Works	Minor Works	Total for 1913-14	Total for 1912-13	Total for 1911-12
41,100,485	4,380,422	45,486,607	43,442,253	41,510,000
4,409,123	344,076	4,843,799	4,543,262	4,116,000
1,338,761	151,774	1,490,535	1,449,296	1,390,000
3,100,402	192,002	3,353,204	3,093,966	2,725,000
7 09	4 39	7 37	7 12	6 6
15,242,930	1,716,566	16,959,445	16,490,160	17,099,000

These figures take no account of the indirect advantages of irrigation. They are — The produce of the country is greatly increased, the railway receipts are enhanced, famine expenditure is diminished and misery and economic disturbances reduced. Nor do they take account of the progress made in Native States, some of which, like Gwalior and Mysore, have shown conspicuous liberality.

**Future of Irrigation**

It is sometimes asserted, by those who take only a superficial view of Indian irrigation that we are approaching the end of the programme of productive works. There could be no greater fallacy. The scheme of great works is still vast. There is now under consideration, as explained in the section where the action taken on the Commission's recommendations is summarised, a project for the improvement of irrigation in Sind, by the construction of a weir at Sukker and the digging of a series of canals, the substitution of perennial for inundation canals, and how instead of 11½ million lbs. this is estimated at Rs 781 lakhs (£5,211 millions). This scheme is estimated to confer only a superficial view of Indian irrigation that

[illegible]

**WELLS AND TANKS.**

The wells in India are of every possible description. They may be just holes in the ground, or a few feet or a few yards deep, or they may be temporary or permanent wells or cisterns, or they may be wells or cisterns with a brick or stone lining. They may be wells or cisterns with a brick or stone lining, or they may be wells or cisterns with a brick or stone lining.

### Varieties of Wells

Wells in India are of every possible description. They may be just holes in the ground, or a few feet or a few yards deep, or they may be wells or cisterns, or they may be wells or cisterns with a brick or stone lining. They may be wells or cisterns with a brick or stone lining, or they may be wells or cisterns with a brick or stone lining.

irrigation ducs

It is a fact that the Government does not have the money to pay for the demands for irrigation. It is a fact that the Government does not have the money to pay for the demands for irrigation. It is a fact that the Government does not have the money to pay for the demands for irrigation.

## Economic Changes

The first of these is the fact that the  
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sands, or in the sandy wastes of Bikanir, where the water level is three hundred feet below the surface, to still more. The means of raising the water vary in equal degree. There is the *puccan*, or weighted lever, raising a bucket at the end of a pivoted pole, just as is done on the banks of the Nile. This is rarely used for lifts beyond fifteen feet. For greater lifts bullock power is invariably used. This is generally harnessed to the *mot*, or leather bag, which discharges the water into a sump automatically on reaching the surface. By this means from thirty to forty gallons of water are raised at a time, and in its simplicity, and the ease with which the apparatus can be constructed and repaired by village labour, the *mot* is unsurpassed in efficiency. There is also the Persian wheel, an endless chain of earthenware pots running round a wheel. Recently attempts have been made, particularly in Aludra, to substitute mechanical power, furnished by oil engines, for the bullock. This has been found economical where the water supply is sufficiently large, especially where two or three wells can be linked. Government have systematically encouraged well irrigation by advancing funds for the purpose and exempting well watered lands from extra assessment due to improvement. These advances, termed *ladai*, are freely made to approved applicants, the general rate of interest being 6 per cent. In Aludra and Bomday ryots who construct wells, or other works of agricultural improvement, are exempt from enhanced assessment on that account. In other provinces the exemption lasts for specific

periods, the term generally being long enough to recoup the owner the capital sunk. Tanks. Next to the well, the indigenous instrument of irrigation is the tank. The village or the *Chingripud* district of Aludra, which still irrigate from two to four thousand acres are said to be over 1,100 years old. Tank irrigation is practically unknown in the Punjab and in Sind, but it is found in some form or other in all other provinces, including Burma, and finds its highest development in Aludra. In the ryotwari tracts of Bombay and Madras all but the smallest tanks are controlled by Government. In the zemindari tracts only the largest tanks are State works. According to the latest figures the area irrigated from tanks is about eight million acres, but in many cases the supply is extremely precarious. So far from tanks being a refuge in famine they are often quite useless inasmuch as the rainfall does not suffice to fill them and they remain dry throughout the season. The value of the crops raised on irrigated lands in India in 1913-14 was Rs. 81 crores.

### CANAL COLONIES.

The canal colonies represent the extreme case of improvement in agricultural conditions effected by irrigation. In the Punjab uplands now watered by the Lower Chenab and Lower Jhelum Canals, irrigation has completely altered the face of the country, so that it supports in unparalleled prosperity a population numbering a hundred to every one of its former poverty-stricken denizens, while land once rears as a gift sells with ease at £15 an acre. The largest of the canal colonies, the Chenab Colony, on the Lower Chenab Canal, lies in the Beema Doh, between the Chenab and Ravi Rivers, and has a total area of some 8,900 square miles. This area was until 1892 expressly inhabited by nomad pastoral tribes, whose total numbers were estimated at less than 70,000. Cultivation was rendered possible only by the construction of the Chenab Canal. As far as the canal and its distributaries were concerned, the land (which was waste and owned by Government) was allotted to various classes of grantees, the bulk of the grants being made to immigrant peasants, including men from the best agricultural districts in the Province. Since its foundation the colony has enjoyed remarkable prosperity. The nomads to whom a large portion of the land was allotted, though without any previous knowledge of agriculture, assimilated the practices of their new neighbours with extraordinary

success, and the whole colony is now as well cultivated as almost any part of India. The work of colonisation began in 1892, by 1901 the population had increased to over 791,000 and at the end of 1901-02 some 2,470 square miles out of a total allottable area of about 2,600 square miles had been allotted. In September 1912 the allottable area was returned at 3,040 square miles, and the area actually allotted at 2,870 square miles, while the total population had risen to over 1,111,000. The export of wheat from the Lyallpur district in the last year of the decade reached (the total) 150,000 tons. The Jhelum Canal, on the Lower Jhelum Canal, occupies some 900 square miles of State land in the Shapur District, and is a more recent development. Colonisation began in 1903, and was conducted on lines similar to those adopted in the Chenab Colony, but a large proportion of the grants were made on the condition that a suitable mare should be maintained for breeding purposes. Between 1906, when an informal census was taken, and 1911 the population of the colony proper increased from 73,734 to 161,806. Up to September 1912 some 630 square miles had been allotted out of an allottable area of about 780 square miles. The Channai Colony, a much smaller colony on the Part Doh Canal in the Lahore District



## Land for Soldiers.

Of the remaining 10,000 rectangles 7,000 will constitute the horse and mule-breeding grants. For these the holders of the 17,000 rectangles mentioned above will compete. The land will be given out on ten years' leases on condition that the tenant of each rectangle maintains a mare. A large proportion of the competitors will be military men. The strong military element among the colonists should go of the scheme. A cavalry man, especially, should make first rate breeder. The soldier-privileges will be selected by the military authorities, after the war, and will probably be for the most part retired officers and non-commissioned officers.

There are only about 78,000 acres of Government land irrigated by the Upper Chenab Canal and of this 12,000 acres will receive perennial irrigation, whilst the remainder will be irrigated for the kharif harvest only. On the Upper Chenab Canal and on the Upper Jhelum Canal no more than 10,000 acres is available for colonization. Out of this provision has been made up to a maximum of 15,000 acres for a division who rendered assistance to the criminal administration, 5,000 acres are to be given as compensation grants and another 8,000 acres 6,000 acres have been provided for tenants now holding land on the Lower Jhelum Canal, whom it desired to remove in order to allow for the extension of certain regimental horse runs. 1,000 acres are desired for special reward grants to military officers, and the balance will provide for grazing grounds and miscellaneous requirements.

On October 13th, 1915, the Government of India issued, in a more complete form than hitherto been available, a summary of their colonization policy, which is of special interest in relation to the provision of land for ex-soldiers in the course of this they said—

The older canals left unirrigated the upper portions of the Jech and the Rechna Doabs and the lower parts of the Bari Doab. The canals of the triple project—the upper Jhelum, the upper Chenab and the lower Bari Doab canals—will bring water to much of the land in the hitherto unwatered portions of these three Doabs. The first and second of the canals, though they will irrigate some 150,000 and 650,000 acres, respectively, give little scope for schemes of colonization as the areas of the Government waste included within the limits of irrigation are comparatively speaking small. On the lower Bari Doab canal, however, the area available for colonization is something like 1,200,000 acres. The bulk of the land, about 750,000 acres (or 30,000 rectangles of 25 acres apiece) is to be given out on terms which will encourage the breeding of horses and mules. About 12,000 rectangles will be distributed, for the most part in grants of one rectangle each, to peasant colonists and ex-soldiers for cultivation. No conditions in regard to horse and mule-breeding will attach to the tenure of these rectangles, but the grantees will be eligible for extra rectangles to which such condition apply. Of these 17,000 rectangles about 7,000 have been set apart for ex-soldiers and for the rest selections have already been made from the peasants of districts lying west of the Sutlej.

# Projects under investigation

Province	Name and probable classification of work	Estimated cost of project in lakhs of rupees	Estimated cost in rupees	Duration in years	Location	Area in acres	Value of crops
Madras	Canary river project	70	47,000	10	Large	100,000	100
	Madras river project	600	70,000	10	Large	100,000	100
	Lower Madras project	100	10,000	10	Large	100,000	100
	Madras project	11	1,000	10	Large	100,000	100
Bombay	Golkar canal extension project	150	150,000	10	Large	100,000	100
	Mitha right bank canal extension	170	170,000	10	Large	100,000	100
	Right bank canal from the tail water of the Bombay Division project	27	1,000	10	Large	100,000	100
	Right canal, Subkar Barage and widening of the canal	70	2,000	10	Large	100,000	100
Bengal	Sutanuwah, Begar canal	10	177,700	10	Large	100,000	100
	Danodhar canal	10	150,000	10	Large	100,000	100
	Extension of the Tribeni canal	16	50,000	10	Large	100,000	100
	Karamnasa project	7	20,000	10	Large	100,000	100
United Provinces	Betan canal	15	30,000	10	Large	100,000	100

## Projects

ion—contd

Province	Name and probable classification of work	Estimated cost in lakhs of rupees	Irrigable area in acres	Districts benefited	Principal crops that will be produced
United Provinces and Punjab	Sarda-Ganges, Juma and feeders projects	616	1,524,000	<i>In the United Provinces—</i> Rampur State, Pilibhit, Shahjahanpur, Hardoi, Bareilly, Moradabad, Budoun, Saharanpur, Muzaffarnagar, Meerut, Bulandshahr, Aligarh, Mathura, Agra, Etah, Mathpuri, Farrukhabad, Etawah, Cawnpore, Fatehpore and Allahabad  <i>In the Punjab—</i> Gurgaon, Karnal, Delhi, Rohtak, Hissar, Patiala, and Hind States Pilibhit, Shahjahanpur, Meerut, Bareilly, Hardoi, Lucknow, and Unao Lahore, Ferozpur, Montgomery, Multan, Bhikner and Bahawalpur States Khyber Bhandara	All the principal <i>Kharif</i> and <i>Kharif</i> crops grown in the United Provinces
Alternative					
United Provinces	Sarda-Elchia Feeder and Sarda canal for Oudh	350	745,300	Pilibhit, Shahjahanpur, Meerut, Bareilly, Hardoi, Lucknow, and Unao	Do
Punjab	Stutlej Valley project	875	3,000,000	Lahore, Ferozpur, Montgomery, Multan, Bhikner and Bahawalpur States	Wheat, gram, jowar and cotton
Burma	Remodelling the Kinda canal	15	85,000	Kyaukse	Rice
Central Provinces	Pangoli Nalla tank project	16	23,000	Bhandara	Do
	Deena Kadi Tank project		47,250	Chanda	Do
	Anamher reservoir project		50,000	Lorail	Wheat and barley
	Tornal reservoir project		44,000	Do	Wheat, barley and jowar
Baluchistan	Gamboli reservoir project	Do	218,000	Sibi	Wheat and barley
	Zhob project	Do	200,000	Zhob	Wheat, barley and jowar
	Barshore reservoir project	Do	16	Quetta Peshin	Wheat and barley
	Total	4,350 to 4,657	9,441,424 to 10,520,124	supplementing to Chushidkhan	



## Buildings and Roads

The Buildings and Roads branch of the Public Works Department embraces all the operations of the Department which are not classed under the special heads of Railways and Irrigation. It includes the extension and maintenance of the road system, the construction and repair of all the buildings required for the proper discharge of the functions of Government in all its branches, and a large miscellaneous class of works of public improvement, including lighthouses, harbours, embankments, boat bridges, and ferries, and the water supply and sanitation of towns.

The operations of this branch of the Department are classed primarily under the head of Civil Works, the expenditure on which is chiefly met from provincial resources. The classification of this expenditure for 1913-14 under the various heads is shown in the following table:—

	Central Pro- vinces and Berar	Burma	Assam	Bengal	Bihar and Orissa	United Pro- vinces of Agra and Oudh	Punjab	North- West Frontier Pro- vince	Madras	Bombay	India General	Total
Imperial*	£ 77,724	£ 21,271	£ 2,805	£ 110,420	£ 13,848	£ 70,214	£ 41,037	£ 218,934	£ 31,056	£ 56,087	£ 256,705	£ 910,312
Provincial*	458,910	674,107	441,162	681,244	554,917	600,262	640,300		1,090,315	701,508		6,049,824
Total	536,634	695,378	443,967	791,664	568,765	670,476	657,937	218,934	1,130,373	850,285	256,705	6,860,136
* Includes expenditure by the Civil Department in addition to that by the Public Works Department												
† Expenditure by Civil Officers from Imperial Funds												£ 47,304
Expenditure in England												£ 101,184
Grand Total												£ 7,008,024

The extension of local Government in India has thrown a large portion of the smaller class of public works into the hands of the local boards. Speaking generally, the boards maintain their own establishments, but in the case of any works of unusual difficulty they have recourse to the professional skill of the Public Works Officers.

# Posts and Telegraphs.

## POST OFFICE.

The control of the Posts and Telegraphs of India is vested in an officer designated by the Government of India in the Department of Commerce and Industry. The superior staff of the Director-General of Posts and Telegraphs who works in subordination to the Government of India in the Department of Commerce and Industry consists on the postal side of two Deputy Directors-General (who are officers of the rank of Postmaster-General), four Assistant Directors-General (whose status is similar to that of Deputy Postmaster-General), and two Personal Assistants (who are selected from the staff of Superintendents).

For postal purposes, the Indian Empire is divided into eight circles as shown below, each in charge of a Postmaster-General—Bengal, Central, Madras, Punjab and North-West Frontier and United Provinces, The Central Circle comprises roughly the Central Provinces and the Central India and Rajputana Agencies. The Postmaster-General are responsible to the Director-General for the whole of the postal arrangements in their respective circles, with the exception of those connected with the conveyance of mails by railways and inland steamers which are entrusted to four officers bearing the designation of Inspector-General of Railway Mail Service and Sorting. All the Postmaster-Generals are provided with Personal Assistants, while those in charge of the largest circles are also assisted by Deputy Postmaster-Generals. The eight Postal Circles and the jurisdictions of the four Inspectors-General are divided into Divisions each in charge of a Superintendent, and each Superintendent is assisted by a certain number of officials styled Inspectors or Assistant Superintendents.

Generally there is a head Post Office at the head-quarters of each revenue district and other post offices in the same district, are usually subordinate to the head office for purposes of accounts. The Postmasters of the Calcutta, Bombay, and Madras General Post Offices are directly under the Postmaster-General and the least of them exercises the same powers as a Superintendent of Post Offices in respect of inspections, appointments, leave and punishment.

In accordance with an arrangement which has been in force since 1883, a large number of sub-post offices and a few head offices perform telegraph work in addition to their postal work and are known by the name of combined offices. The policy is to increase telegraph facilities everywhere and especially in towns by opening a number of cheap telegraph offices working under the control of the Post Office. The telegraph expenditure on account of these combined offices is borne by the Telegraph Department to which the whole of their telegraph revenue is also credited.

Letters		When the postage is prepaid	When the postage is wholly unpaid.	When the postage is insufficiently prepaid.
Not exceeding 1 tola	Exceeding 1 tola but not exceeding 10 tolas	Every additional 10 tolas or part of that weight	Every 10 tolas or part of that weight	Double the deficiency (chargeable on delivery)
Not exceeding 1 tola	Exceeding 1 tola but not exceeding 10 tolas	Every additional 10 tolas or part of that weight	Every 10 tolas or part of that weight	Double the deficiency (chargeable on delivery)



[illegible]

TELEGRAPH DEPARTMENT.

**Telegraphs**—Up to 1912 the telegraph system in India was administered as a separate Department by an officer designated Director General of Telegraphs who worked directly under the Government of India in the Department of Commerce and Industry. In that year it was decided to vest the control of Posts and Telegraphs in a single officer as an experimental measure with a view to the eventual amalgamation of the two Departments.

In pursuance of this policy an experimental amalgamation of the two services was introduced in the Bombay and Central Circles from the 1st July 1912. The fundamental principle of this scheme which follows closely the system in force in the United Kingdom and several other European countries are that the traffic and engineering work of the Telegraph Department and engineering work of the Telegraph Department is as follows—

**Inland Traffic**—The traffic for inland telegrams is as follows—

Accounts-General  
Assisted by a staff of Deputy and Assistant Accounts-General  
The audit work of the Telegraph Department is, like that of the Post Office, entrusted to the Accounts-General, Posts and Telegraphs, assisted by a staff of Deputy and Assistant Accounts-General  
With a suitable staff of attached officers

The telegraph traffic work is now under the control of the Posts and Telegraphs General Manager, who is assisted by a Deputy Postmaster General and a Superintendent of Telegraph Engineering. The four Circles are divided into twenty divisions each of which is in charge of a Superintendent of Telegraph Engineering. The four Circles are divided into twenty divisions each of which is in charge of a Superintendent of Telegraph Engineering. The four Circles are divided into twenty divisions each of which is in charge of a Superintendent of Telegraph Engineering.

Private and State	Ordinary Press	As a	Minimum charge	Each additional word	over 12	Address charged for
10	10	10	10	0 2	0 3	}
10	10	10	10	0 2	0 3	

<p>In 1914 the complete amalgamation of the two Departments was sanctioned by the Secretary of State and introduced from 1st April the Director-General himself consist on the Engineering side of a Chief Engineer, Telegraphs, with an Assistant and a Personal Assistant to the Director-General. For traffic work there is a Deputy Director-General with an Assistant and an Assistant Director-General. In the Circles the scheme which has been introduced follows closely on the lines of the experimental one referred to above. For telegraph engineering purposes India is divided up into three Circles each in charge of a Director of Telegraphs. For Burma special arrangements were con-</p>	<p>Additional charges          Acknowledgment of receipt          6 annas          6 " " Multiple telegrams, each 100 words          4 " " One quarter of charge for telegrams          If both the offices of origin and destination are closed, only one of the offices is closed</p>	<p>For acceptance of Express telegrams during the hours when an office is closed</p>
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year were generally on a lower level as against those of the previous year.

		Total	
I	Food Drink and Tobacco	II	Raw Material
III	Manufactured Articles	IV	Miscellaneous
19793	1958	236	179
10667	932	273	263
68	112	31	117
1513	708	1513	206
Rs (lacs)	Rs (lacs)	Rs (lacs)	Percent
Relative share percent	Decade as compared with 1911-12		

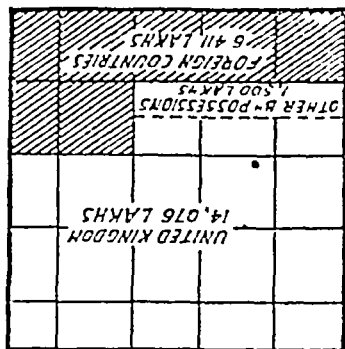


# Distribution of trade of British India between British Possessions and Foreign Countries in 1914-15, as compared with the year 1913-14

*It is to be seen that India imports chiefly from the British Empire and exports to countries outside the Empire*

1913-14

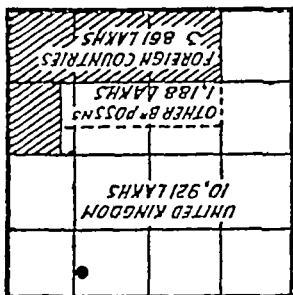
Total Imports 29,987 lakhs



United Kingdom 47 per cent  
Other British Possessions 15 per cent  
Foreign Countries 21 per cent  
Other 17 per cent

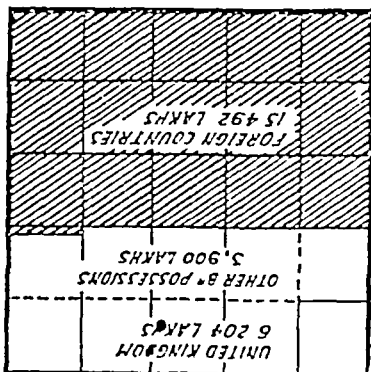
1914-15

Total Imports 13,970 lakhs



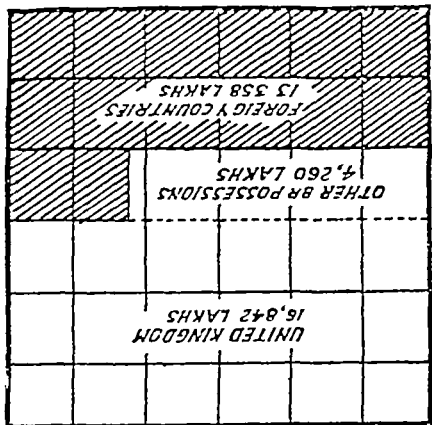
United Kingdom 78 per cent  
Other British Possessions 8 per cent  
Foreign countries 28 per cent

Total Exports 27,700 lakhs



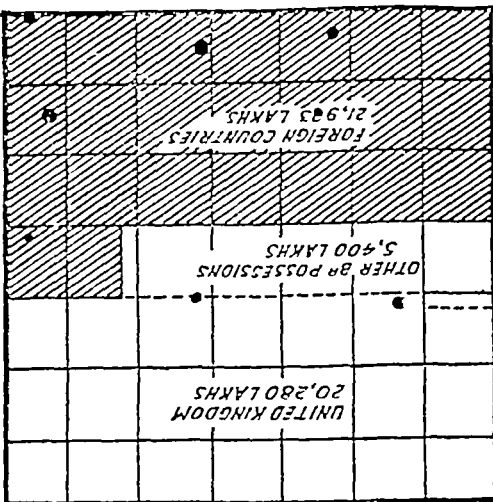
United Kingdom 22 per cent  
Other British Possessions 14 per cent  
Foreign Countries 56 per cent  
Other 4 per cent

Total Trade 31,460 lakhs



United Kingdom 53 per cent  
Other British Possessions 13 per cent  
Foreign Countries 43 per cent

Total Trade 47,587 lakhs



United Kingdom 43 per cent  
Other British Possessions 11 per cent  
Foreign Countries 46 per cent

Note.—Total trade includes private merchandise and treasure on private

in price, and the price of coffee was lower than in 1913-14

Relative share in 1913-14	Percentage	Total			
		I	II	III	IV
		Food, Drink and Tobacco	Raw Materials	Manufactured Articles	Miscellaneous
		14.97	30.07	16.58	1.86
		27.6	15.1	26.5	1
		15.77	12.39	18.01	55
		24.4	34.6	14.7	22.7
		27.3			

### Re-exports—The re-export trade which is

comparatively unimportant with a total value of Rs 41 crores, declined, although not in the same proportion as the import and export trade. The trade is carried on chiefly through the ports of Bombay and Karachi, which continue to act as receiving and distributing centres between Europe on the one hand and the Persian Gulf and the East Coast of Africa on the other. The articles of trade are mostly manufactured goods, the most important class being cotton goods, of which the value declined from Rs 1,56 lakhs to Rs 87 lakhs on account of smaller exports to Aden, Arabia, Bahrain and Ceylon. This decline was partly made good by sugar which accounted for an increase of Rs 80 lakhs sent to the United Kingdom, Persia, and East African Protectorate. Raw wool imported over the land frontier maintained itself with a slightly higher range of prices.

**Calculated Values**—The value of part of the trade in the year under review was inflated by increased prices. In order to examine, therefore, recent with previous trade, it is necessary to eliminate the effect of the variation of prices by the method that is universally employed for this problem. It will be sufficient to show here how the 1914-15 figures appear to be calculated in the prices of 1913-14. The calculated values in short represent what the value of the trade would have been, had prices remained the same as in 1913-14. The difference between the calculated values and the actual values recorded in 1914-15 shows the change in prices. Under imports the decline of Rs 45,32 lakhs is made up of a decline of Rs 40,02 lakhs or 25 per cent due to a decrease in the volume of trade set off by an increase of Rs 70 lakhs or 5 per cent due to a rise in prices. Similarly in exports the fall of Rs 66,72 lakhs is due to a decrease of Rs 49.35 lakhs or 20 per cent in the volume of trade and of Rs 17,37 lakhs or 9 per cent in prices. Taking the imports and exports together the total recorded decrease is Rs 1,12,01 lakhs of which Rs 93,37 lakhs or 22 per cent is due to the smaller volume of trade and Rs 18,67 lakhs or 5 per cent to lower prices. In short prices were 5 per cent lower than those of 1913-14, and the volume of imports and exports fell by 22 per cent.

**Balance of Trade**—The excess of exports over imports, of merchandise and treasure, in 1914-15 was Rs 20,72 lakhs (213.8 millions) including Government transactions and Rs 25,20 lakhs (216.8 millions) excluding Government transactions. The average for the past three years is Rs 23,48 lakhs (215.6 millions) and Rs 34,07 lakhs (222.7 millions) respectively. The following tables show the net figures of merchandise and treasure, excluding Government transactions, for the years 1910-11 to 1914-15—

	Net exports of Merchandise Rs (lakhs)	Net imports of Treasure Rs (lakhs)	Total Net export Rs (lakhs)
1910-11	80,53	32,54	47,99
1911-12	89,28	43,06	46,22
1912-13	85,09	46,15	40,94
1913-14	65,93	29,56	36 07
1914-15	43,06	18,46	25,20



Japan by 7 per cent in imports and by 11 per cent in exports and with the United States of America by 2 per cent in imports and by 20 per cent in exports.

		1911-12		1911-11		December 1911-12	
Units -	COUNTRIES -	Im ports	Ex- ports	Im ports	Ex- ports	Im ports	Ex- ports
		(lacks)	(lacks)	(lacks)	(lacks)	(lacks)	(lacks)
UNITED KINGDOM	Im ports	92.91	57.61	1,17.78	58.35	1,75.93	21.61
	Ex- ports	1.63	5.27	6.90	1.26	16.36	2.66
	Total	94.54	62.88	124.68	59.61	192.29	24.27
	Im ports	1.76	8.81	10.60	2.60	17.72	20.41
	Ex- ports	4	1.87	1.91	6	2.17	2.33
	Total	5.76	10.68	12.51	8.60	19.83	22.74
	Im ports	1.52	6.87	8.39	2.20	7.89	10.09
ITALY	Ex- ports	4.41	15.66	20.10	1.78	22.69	27.17
Total	5.94	22.53	28.49	3.98	29.58	37.26	
RUSSIA	Im ports	1.37	9.31	18.18	1.31	37.12	22.79
	Ex- ports	29.33	68.96	34.15	88.10	1,22.14	4,32.13
	Total	30.70	78.27	35.46	89.41	139.26	454.92
	Im ports	6.27	16.48	17.53	30.47	57.00	11.26
	Ex- ports	29.33	68.96	34.15	88.10	1,22.14	4,32.13
	Total	35.60	85.44	51.68	118.57	169.26	153.39
	Im ports	1.37	9.31	18.18	1.31	37.12	22.79
GERMANY	Ex- ports	4.65	10.20	11.83	12.66	26.12	30.08
Total	12.92	19.41	29.81	29.78	58.94	57.24	
AUSTRIA-HUNGARY	Im ports	1.29	4.53	5.82	4.29	10.01	11.30
	Ex- ports	33	1.75	2.08	38	3.04	8.62
	Total	34.29	6.28	7.90	42.29	13.05	19.92
	Im ports	6.27	16.48	17.53	30.47	57.00	11.26
	Ex- ports	29.33	68.96	34.15	88.10	1,22.14	4,32.13
	Total	35.60	85.44	51.68	118.57	169.26	153.39
	Im ports	1.37	9.31	18.18	1.31	37.12	22.79
NETRALS	Ex- ports	1,37.93	1,81.50	3,19.52	1,83.25	2,48.88	4,32.13
Total	29.33	68.96	98.29	34.15	88.10	1,22.14	4,32.13
GRAND TOTAL Foreign (Sea-borne trade)	Im ports	1,37.93	1,81.50	3,19.52	1,83.25	2,48.88	4,32.13
	Ex- ports	29.33	68.96	98.29	34.15	88.10	1,22.14
	Total	167.26	250.46	417.81	217.40	336.98	554.27
	Im ports	6.27	16.48	17.53	30.47	57.00	11.26
	Ex- ports	29.33	68.96	34.15	88.10	1,22.14	4,32.13
	Total	35.60	85.44	51.68	118.57	169.26	153.39
	Im ports	1.37	9.31	18.18	1.31	37.12	22.79



(a) Trade per head of Population in selected Countries

—	Population in millions	1900	1905	1910	1911	1912	1913	1914
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(a) Trade per head of Population in selected Countries

	India	Russia	United Kingdom	France	Germany	Italy	United States	Japan	China
—10	315	104	45	40	65	35	92	50	400
—20	8 8	18 0	253 2	135 14	135 12	56 6	90 6	17 7	2 2
—30	10 11	21 7	335 10	202 8	186 6	91 15	110 9	28 8	1 1
—40	11 0	21 3	311 10	211 8	200 13	95 11	119 9	28 8	4 4
—50	12 8	21 1	367 15	226 0	219 12	105 10	156 10	33 9	4 13
—60	13 3	21 10	386 2	232 3	230 11	108 5	136 3	39 7	5 8
—70	11 13	17 6	376 0	167 10	(b)	87 7	131 2	36 3	4 11
—80					(b)				—15

(a) Figures are for the calendar year

The share of the per head of population in India is 3 per cent of that of the United Kingdom, 7 per cent of France, and 9 per cent of the United States of America. In view of the fact that on trade, the decrease per head of population as compared with the previous year is noteworthy. It will be seen from the table above that the decrease in the case of India for the calendar year 1914 is only 10 per cent.

Trade by Provinces.—Bengal has a much larger export and import business than Bombay, the trade of Bombay and Sind being almost equal to that of Bengal as regards imports but less as regards exports. Bengal does most of the trade with Europe, America and Australia, while Bombay does the greater part of the trade with Asiatic ports and Africa. Since the outbreak of war, Bengal has done about half the export trade, the shares of the other provinces being as follows—Bombay 19 per cent, Madras 12 per cent, Burma 10 per cent, and Sind 9 per cent.

Share per cent	—	Import Rs (lacs)	Export Rs (lacs)	Total Rs (lacs)
41.2	Bengal and Orissa	57,17	74,47	1,31,64
29.8	Bombay	46,10	49,12	95,22
10.7	Madras	12,52	21,61	34,13
8.4	Burma	10,55	16,26	26,81
100	Total	1,37,93	1,81,69	3,19,52

**Trade by Ports**—The trade of the chief ports and important subordinate ports given India possesses a very long sea board, but very few harbours, and hence about 92 per cent of the foreign trade passes through the five chief ports, two of which are situated at a considerable dis-









yarns then represented nearly one-half of the total imports from abroad, and that the single other important commodities when practically every single other commodity was being subjected to an import duty could not be justified on its merits as a sound fiscal measure, much less when it was an admitted fact that the Budget would still show a deficit.

**Excise Duties Imposed**—The opposition to this measure, though it failed to secure its rejection in the Legislative Council, was strong enough to induce the Secretary of State to reconsider the matter. Holding to the united representations of the Government of India and of Indian public opinion, His Majesty's Government eventually agreed to the re-imposition of import duties on cotton yarns and fabrics provided that it could be shown that such a measure was necessitated by the position of Indian finances, and that it was combined with an excise duty which would drive the import tax of any protective character. Accordingly, in December 1894, consequent on the further deterioration in the financial position, two bills were introduced in the Legislative Council. The first of these subjected cotton yarns and fabrics to the general import duty of 5 per cent ad valorem. The second imposed an excise duty on all cotton yarns of 20s and above produced by mills in British India. In introducing this latter Bill the then Finance Minister, Sir James Westland, was careful to explain that the policy underlying its provisions had been imposed on the Government of India by the Secretary of State in pursuance of the resolution of the House of Commons quoted above. The provisions of this particular Bill are of little interest. From the first it was recognised that they were unpractical. Lancashire and Indian spinners disagreed as to the point at which the line should be drawn exempting Indian yarns from the Excise Duty. Practical difficulties were pointed out by Indian spinners as to the impossibility of spinning precisely to a particular count. From the Lancashire point of view it was contended that the Bill offered facilities for evasion while it was admitted that under the system adopted in the Bill, the taxation of Indian and Lancashire products was not being carried out on a similar basis.

**Act of 1896**—The Act was in fact doomed to be short-lived, and in December 1895 the Government of India were compelled to re-consider the whole position and to introduce an entirely new measure which became law in January 1896 as the Indian Cotton Duties Act II of 1896. This measure proceeded from two considerations, namely, that no attempt should be made to obtain any duty from yarns whether imported or locally manufactured, and that an equal rate of duty should be applied to all woven goods whether imported or of Indian origin. With the object of conciliating the opposition, the rate of duty was fixed at 3½ per cent as opposed to the general rate of Customs duty of 5 per cent. The main provisions of the Act provided that the assessment for the purposes of collecting the excise duty should be based on returns submitted by the mill-owners, and that provision should be made for a rebate in the case of woven goods exported out of India. No control beyond a requirement that staple-

**New Factors in the Situation**—Since the passing of this measure into law the policy of the Government of India in this respect has frequently been the subject of attack in the press and in the Legislative Councils while it has also formed the subject of continued representations by the industrial interests affected and political organizations. In more recent years the agitation in favour of the abolition of the excise duties has been revived by the growth in England of a strong body of public opinion in opposition to the policy of free Trade. Advancing has been taken of this new phase in English economic thought to

**Criticisms of the Measure**—It is not possible within the limits of the present article to do more than summarise the criticisms with which this measure was received in India. Much of the opposition was based on grounds of a transient character, as for instance that the Indian industry was in a state of continued depression and that it had been hard hit, particularly in respect of its export trade, by the currency devaluation, and by the uncertainty as to the fiscal policy of Government in connection with the Indian power weaving industry. But the hostility to this measure, as also to the other measures already described, clearly proceeded from the feeling that the policy of the Government declared by Lancashire, and of state had been dictated by Lancashire, and that the action of Lancashire was due not so much to the fact that there was any real competition between Indian and Manchester goods, but to a desire to handicap the Indian industry whose progress was already causing uneasiness to Lancashire interests. It was argued that the imports from Lancashire were practically all of the higher counts, which, for climatic and other reasons, India could not produce, and in any case the advantage to the Indian millowner of the import duty was considerable and was counterbalanced by certain drawbacks, arising from the inferiority of Indian labour, which could not be overcome, and that this advantage, such as it was, could scarcely be said to have a protective character. In view of the higher cost of initial equipment in the case of an Indian mill which has to import its machinery, and of working expenses consequent on the scarcity of skilled labour and on the necessity of importing stores required in the production of cloth. Finally, from the standpoint of the consumer, very severe criticism was directed against the reduction, in favour of imported cotton goods, of the general rate of duty from 5 per cent to 3½ per cent on the ground that the effect of the legislation would relieve the richer classes who were consumers of the finer Manchester fabrics and impose new taxation on the poorer classes whose requirements were met by the Indian mills.

[illegible]

## JOINT STOCK BANKS.

Cash and Investment	Deposits	Reserve	Capital	Chartered Bank of India Comptoir National D'Escompte de Delhi and London Bank, Ltd Eastern Bank, Ltd Hongkong & Shanghai Bank International Banking Corp National Bank of India Russo Asiatic Bank (1912) Yokohama Specie Bank
9281	18816	1800	1200	1200
9318	63097	1638	8000	3000
338	1447	22	337	4743
790	1395	55	358	1000
1108	32931	3825	1300	650
2689	4380	650	650	562
1947	5132	500	1100	1000
5283	14832	1100	1743	1743
7884	35847	2300	3000	3000
6702	18602	2008		

In Thousands of £

or be accompanied by the documents relating to the goods in respect of which they are drawn at home or abroad, credits opened by Banks in India are sent home by the first possible mail so that presuming they are rediscounted as soon as they reach London the return of the Banks are able to secure the return of their money in about 16 or 17 days instead of having to wait for three months, which would be the case if they were unable to rediscount. It must not be assumed however that all bills are rediscounted as soon as they reach London as at times it suits the Banks to hold up the bills in anticipation of a fall in the London discount rate while on occasions also the Banks prefer to hold the bills on their own account as an investment until maturity.

The Banks place themselves in funds in India for the purpose of purchasing export bills in a variety of ways of which the following are the principal—

- (1) Proceeds of import bills as they mature
- (2) Sale of drafts and telegraphic transfers payable in London and elsewhere
- (3) Purchase of Council Bills and Telegrammatic Transfers payable in India from the Secretary of State
- (4) Imports of bar gold and silver bullion
- (5) Imports of sovereigns from London, Egypt or Australia

The remaining business transacted by the Banks in India is of the usual nature and need not be given in detail.

The following is a statement of the position of the various Exchange Banks carrying on business in India as at 31st December 1914

The above figures do not of course relate to rediscounts of Indian bills alone, as the Banks operate in other parts of the world also, but it may safely be inferred that bills drawn in India form a very large proportion of the whole. The bills against exports are largely drawn at three months' sight and may either be "clean" or

part by Branches outside of India, the Indian Branches' share in the business consisting principally in collecting the amount of the bills at maturity and in furnishing their other branches with information as to the means and standard of the drawees of the bills, and it is as regards the export business that the Indian Branches are more immediately concerned. The Exchange Banks have practically a monopoly of the export finance in India and in view of the dimensions of the trade which has to be dealt with the Banks would under ordinary circumstances require to utilise a very large proportion of their resources in carrying through the business. They are able however by a system of rediscount in London to limit the employment of their own resources to a comparatively small figure in relation to the business they actually put through. No definite information can be secured as to the extent to which rediscounting in London is carried on but the following figures appearing in the balance sheets dated 31st December 1914 of the undenoted Banks will give some idea of this

LIABILITY ON BILLS OF EXCHANGE RE-DISCOUNTED AND STILL CURRENT

Chartered Bank of India	3,871,000
Eastern Bank, Ltd	1,074,000
Hongkong and Shanghai Banking Corporation	11,584,000
National Bank of India, Ltd	1,788,000
Yokohama Specie Bank	4,037,000
	21,854,000

Previous to 1906 there were few Banks of this description operating in India, and such as were then in existence were of comparatively small importance and had their business confined to a very restricted area. The rapid development of this class of Bank, which has been so marked a feature in Banking within recent years, really had its origin in Bombay and set in with the establishment of the Bank of India and the Indian Specie Bank in 1806



## Growth of Joint Stock Banks

The following figures appearing in the Report of the Director General of Statistics shows the growth of the Capital, Reserve and Deposits of the principal Joint Stock Banks registered in India:—

1870	9	1	13
1875	14	2	27
1880	18	3	63
1885	18	5	94
1890	38	17	270

**NATIVE PRIVATE BANKERS AND SHROFFS.**

	Capital & Reserve Deposits	364.	2259
1895	67		
"	82		
1905	84		
1906	133		
"	197		
"	229		
1908	239		
1909	266		
1910	275		
1911	285		
	100		
	126		
	2529		

Nature private Bankers and Shroffs flourished in India long before Joint Stock Banks were ever thought of, and it seems likely that they will continue to thrive for some very considerable time to come. The use of the word "Shroff" is usually associated with a person who charges exorbitant rates of interest to immigrants, but this is hardly fair to the people known as "shroffs" in banking circles, as there is no doubt that the latter are of very real service to the business community and of very great assistance to Banks in India. Under present conditions the Banks in India can never hope to be able to get into sufficiently close touch with the affairs of the vast trading community in India to enable them to grant accommodation to more than a few of these traders direct, and it is in his capacity as middleman that the shroff proves of such great service. In this capacity also he brings a very considerable volume of business within the scope of the Presidency Banks Act, and enables the Presidency Banks to give accommodation not be permitted to give. The shroff's position, which, without his assistance, the Banks would as an intermediary between the trading community and the Banks usually arises in some-thing after the following manner. A shop-keeper in the bazaar, with limited means of his own, finds that, after using all his own money, he still requires say Rs. 25,000 to stock his shop suitably. He thenupon approaches the shroff, and the latter after a position inquiries as to the shopkeeper's position grants the accommodation, if he is satisfied that the business is a good one, and in the case referred to of Rs. 2,500 each. A month or two to the extent of Rs. 2,500 each at a currency of about 2 months in respect of such advances is usually taken by the shroffs in the bazaar is therefore



Bank of Bombay		Bank of Bengal		Bank of Madras	
Date	Rate	Date	Rate	Date	Rate
February 1904	11	February 1903	23	January 1902	14
March " "	25	March " "	9	February " "	20
May " "	19	April " "	30	March " "	7
June " "	16	May " "	6	April " "	1
October " "	13	June " "	12	May " "	29
February 1905	20	July " "	14	June " "	12
March 1905	2	August " "	27	July " "	23
February 1905	16	September " "	20	August " "	12
March " "	9	October " "	17	September " "	6
April " "	30	November " "	29	October " "	10
May " "	6	December " "	30	November " "	20
June " "	14	January 1906	14	December " "	7
July " "	6	February 1906	4	January 1906	2
August " "	27	March 1906	3	February 1906	13
September " "	10	April 1906	1	March 1906	23
October " "	28	May 1906	15	April 1906	30
November " "	30	June 1906	22	May 1906	7
December " "	14	July 1906	5	June 1906	21
January 1907	3	August 1906	6	July 1906	7
February 1907	4	September 1906	12	August 1906	21
March 1907	8	October 1906	3	September 1906	30
April 1907	9	November 1906	17	October 1906	6
May 1907	8	December 1906	6	November 1906	5
June 1907	7	January 1907	7	December 1906	5
July 1907	6	February 1907	3	January 1907	4
August 1907	9	March 1907	19	February 1907	23
September 1907	3	April 1907	28	March 1907	13
October 1907	4	May 1907	9	April 1907	3
November 1907	5	June 1907	23	May 1907	14
December 1907	4	July 1907	24	June 1907	8
January 1908	3	August 1907	7	July 1907	5
February 1908	6	September 1907	13	August 1907	3
March 1908	7	October 1907	20	September 1907	17
April 1908	8	November 1907	11	October 1907	12
May 1908	9	December 1907	6	November 1907	15
June 1908	8	January 1908	29	December 1907	28
July 1908	7	February 1908	16	January 1908	16
August 1908	4	March 1908	25	February 1908	8
September 1908	3	April 1908	16	March 1908	16
October 1908	4	May 1908	2	April 1908	4
November 1908	5	June 1908	16	May 1908	29
December 1908	7	July 1908	26	June 1908	17
January 1909	12	August 1908	9	July 1908	6
February 1909	26	September 1908	20	August 1908	24
March 1909	1	October 1908	6	September 1908	21
April 1909	4	November 1908	12	October 1908	12
May 1909	27	December 1908	15	November 1908	21
June 1909	20	January 1909	1	December 1908	28
July 1909	9	February 1909	8	January 1909	16
August 1909	6	March 1909	15	February 1909	4
September 1909	4	April 1909	30	March 1909	27
October 1909	3	May 1909	7	April 1909	27
November 1909	4	June 1909	6	May 1909	10
December 1909	7	July 1909	1	June 1909	29
January 1910	25	August 1909	6	July 1909	1
February 1910	10	September 1909	7	August 1909	6
March 1910	19	October 1909	30	September 1909	20
April 1910	16	November 1909	6	October 1909	7
May 1910	13	December 1909	5	November 1909	8
June 1910	18	January 1910	4	December 1909	9
July 1910	22	February 1910	3	January 1910	10
August 1910	15	March 1910	2	February 1910	15
September 1910	12	April 1910	9	March 1910	15
October 1910	9	May 1910	8	April 1910	15
November 1910	15	June 1910	6	May 1910	15
December 1910	22	July 1910	7	June 1910	29
January 1911	29	August 1910	8	July 1910	4
February 1911	18	September 1910	9	August 1910	5
March 1911	7	October 1910	24	September 1910	28
April 1911	2	November 1910	17	October 1910	13
May 1911	9	December 1910	3	November 1910	23
June 1911	6	January 1911	12	December 1910	9
July 1911	4	February 1911	5	January 1911	4
August 1911	5	March 1911	6	February 1911	3
September 1911	4	April 1911	7	March 1911	13
October 1911	3	May 1911	8	April 1911	3
November 1911	4	June 1911	9	May 1911	14
December 1911	5	July 1911	8	June 1911	14
January 1912	6	August 1911	7	July 1911	22
February 1912	5	September 1911	6	August 1911	5
March 1912	6	October 1911	5	September 1911	6
April 1912	7	November 1911	4	October 1911	6
May 1912	8	December 1911	3	November 1911	7
June 1912	9	January 1912	2	December 1911	8
July 1912	8	February 1912	1	January 1912	9
August 1912	7	March 1912	2	February 1912	10
September 1912	6	April 1912	3	March 1912	12
October 1912	5	May 1912	4	April 1912	16
November 1912	4	June 1912	5	May 1912	20
December 1912	4	July 1912	6	June 1912	23
January 1913	5	August 1912	7	July 1912	30
February 1913	6	September 1912	8	August 1912	30
March 1913	7	October 1912	9	September 1912	30
April 1913	8	November 1912	10	October 1912	30
May 1913	9	December 1912	11	November 1912	30
June 1913	10	January 1913	12	December 1912	30
July 1913	11	February 1913	13	January 1913	30
August 1913	12	March 1913	14	February 1913	30
September 1913	13	April 1913	15	March 1913	30
October 1913	14	May 1913	16	April 1913	30
November 1913	15	June 1913	17	May 1913	30
December 1913	16	July 1913	18	June 1913	30
January 1914	17	August 1913	19	July 1913	30
February 1914	18	September 1913	20	August 1913	30
March 1914	19	October 1913	21	September 1913	30
April 1914	20	November 1913	22	October 1913	30
May 1914	21	December 1913	23	November 1913	30
June 1914	22	January 1914	24	December 1913	30
July 1914	23	February 1914	25	January 1914	30
August 1914	24	March 1914	26	February 1914	30
September 1914	25	April 1914	27	March 1914	30
October 1914	26	May 1914	28	April 1914	30
November 1914	27	June 1914	29	May 1914	30
December 1914	28	July 1914	30	June 1914	30
January 1915	29	August 1914	31	July 1914	30
February 1915	30	September 1914	32	August 1914	30
March 1915	31	October 1914	33	September 1914	30
April 1915	32	November 1914	34	October 1914	30
May 1915	33	December 1914	35	November 1914	30
June 1915	34	January 1915	36	December 1914	30
July 1915	35	February 1915	37	January 1915	30
August 1915	36	March 1915	38	February 1915	30
September 1915	37	April 1915	39	March 1915	30
October 1915	38	May 1915	40	April 1915	30
November 1915	39	June 1915	41	May 1915	30
December 1915	40	July 1915	42	June 1915	30
January 1916	41	August 1915	43	July 1915	30
February 1916	42	September 1915	44	August 1915	30
March 1916	43	October 1915	45	September 1915	30
April 1916	44	November 1915	46	October 1915	30
May 1916	45	December 1915	47	November 1915	30
June 1916	46	January 1916	48	December 1915	30
July 1916	47	February 1916	49	January 1916	30
August 1916	48	March 1916	50	February 1916	30
September 1916	49	April 1916	51	March 1916	30
October 1916	50	May 1916	52	April 1916	30
November 1916	51	June 1916	53	May 1916	30
December 1916	52	July 1916	54	June 1916	30
January 1917	53	August 1916	55	July 1916	30
February 1917	54	September 1916	56	August 1916	30
March 1917	55	October 1916	57	September 1916	30
April 1917	56	November 1916	58	October 1916	30
May 1917	57	December 1916	59	November 1916	30
June 1917	58	January 1917	60	December 1916	30
July 1917	59	February 1917	61	January 1917	30
August 1917	60	March 1917	62	February 1917	30
September 1917	61	April 1917	63	March 1917	30
October 1917	62	May 1917	64	April 1917	30
November 1917	63	June 1917	65	May 1917	30
December 1917	64	July 1917	66	June 1917	30
January 1918	65	August 1917	67	July 1917	30
February 1918	66	September 1917	68	August 1917	30
March 1918	67	October 1917	69	September 1917	30
April 1918	68	November 1917	70	October 1917	30
May 1918	69	December 1917	71	November 1917	30
June 1918	70	January 1918	72	December 1917	30
July 1918	71	February 1918	73	January 1918	30
August 1918	72	March 1918	74	February 1918	30
September 1918	73	April 1918	75	March 1918	30
October 1918	74	May 1918	76	April 1918	30
November 1918	75	June 1918	77	May 1918	30
December 1918	76	July 1918	78	June 1918	30
January 1919	77	August 1918	79	July 1918	30
February 1919	78	September 1918	80	August 1918	30
March 1919	79	October 1918	81	September 1918	30
April 1919	80	November 1918	82	October 1918	30
May 1919	81	December 1918	83	November 1918	30
June 1919	82	January 1919	84	December 1918	30
July 1919	83	February 1919	85	January 1919	30
August 1919	84	March 1919	86	February 1919	30
September 1919	85	April 1919	87	March 1919	30
October 1919	86	May 1919	88	April 1919	30
November 1919	87	June 1919	89	May 1919	30
December 1919	88	July 1919	90	June 1919	30
January 1920	89	August 1919	91	July 1919	30
February 1920	90	September 1919	92	August 1919	30
March 1920	91	October 1919	93	September 1919	30
April 1920	92	November 1919	94	October 1919	30
May 1920	93	December 1919	95	November 1919	30
June 1920	94	January 1920	96	December 1919	30
July 1920	95	February 1920	97	January 1920	30
August 1920	96	March 1920	98	February 1920	30
September 1920	97	April 1920	99	March 1920	30
October 1920	98	May 1920	100	April 1920	30
November 1920	99	June 1920	101	May 1920	30
December 1920	100	July 1920	102	June 1920	30
January 1921	101	August 1920	103	July 1920	30
February 1921	102	September 1920	104	August 1920	30
March 1921	103	October 1920	105	September 1920	30
April 1921	104	November 1920	106	October 1920	30
May 1921	105	December 1920	107	November 1920	30
June 1921	106	January 1921	108	December 1920	30
July 1921	107	February 1921	109	January 1921	30
August 1921	108	March 1921	110	February 1921	30
September 1921	109	April 1921	111	March 1921	30
October 1921	110	May 1921	112	April 1921	30
November 1921	111	June 1921	113	May 1921	30
December 1921	112	July 1921	114	June 1921	30
January 1922	113	August 1921	115	July 1921	30
February 1922	114	September 1921	116	August 1921	30
March 1922	115	October 1921	117	September 1921	30
April 1922	116	November 1921	118	October 1921	30
May 1922	117	December 1921	119	November 1921	30
June 1922	118	January 1922	120	December 1921	30
July 1922	119	February 1922	121	January 1922	30
August 1922	120	March 1922	122	February 1922	30
September 1922	121	April 1922	123	March 1922	3



# The Bank Rate

Date		Rate	Bank of Bengal
1908		10	Bank of Madras
1909		10	
1910		10	
1911		10	
1912		10	
1913		10	
1914		10	
1915		10	
1916		10	
1917		10	
1918		10	
1919		10	
1920		10	
1921		10	
1922		10	
1923		10	
1924		10	
1925		10	
1926		10	
1927		10	
1928		10	
1929		10	
1930		10	
1931		10	
1932		10	
1933		10	
1934		10	
1935		10	
1936		10	
1937		10	
1938		10	
1939		10	
1940		10	
1941		10	
1942		10	
1943		10	
1944		10	
1945		10	
1946		10	
1947		10	
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Bank of Bombay			Bank of Bengal			Bank of Madras		
Date	Rate		Date	Rate		Date	Rate	
January 1914	15	6	March 1914	19	6	October 1914	1	6
May	21	5	May	1	5	January 1914	2	7
June	4	4	June	4	4	May	25	6
"	25	3	July	9	3	June	8	5
August	6	4	August	6	5	August 1915	21	5
"	13	5	November	5	6	October 1915	12	6
"	20	6	June 1915	2	5	June 1915	7	5
June 1915	2	5	June	1	6	December	1	6

## BANKERS' CLEARING HOUSES.

The principal Clearing Houses in India are those of Calcutta, Bombay, Madras, and Karachi, and of these the first two are by far the most important. The members at these places consist of the Presidency Banks, most of the Exchange Banks and English Banking Agency firms, and a few of the better known of the local Joint Stock Banks. No Bank is entitled to claim to be a member as of right and any application for admission to a Clearing must be proposed and seconded by two members and be subject thereafter to ballot by the existing members.

The duties of settling Bank are undertaken by the Presidency Bank at each of the places mentioned and a representative of each member attends at the office of that Bank on each business day at the time fixed to deliver all cheques he may have negotiated on other members and to receive in exchange all cheques drawn on him negotiated by the latter. After all the cheques have been received and delivered the representative of each Bank advises the settling Bank of the difference between his total receipts and deliveries and the settling Bank thereafter strikes a final balance to satisfy itself that the totals of the debtor balances agrees with the total of the creditor balances. The debtor Banks thereafter arrange to pay the amounts due by them to the settling Bank.

The figures for the Clearing Houses in India above referred to are given below —

Total amount of Cheques Cleared Annually  
In lakhs of Rupees

	Calcutta	Bombay	Madras	Karachi	Total
1901	Not available	6,511	1,338	178	8,027
1902		7,013	1,295	268	8,576
1903		8,762	1,464	340	10,566
1904		9,492	1,536	365	11,393
1905		10,927	1,560	324	12,811
1906		10,912	1,548	400	12,895
1907	22,444	12,645	1,683	630	37,167
1908	21,981	12,686	1,754	643	36,263
1909	19,776	14,375	1,948	702	36,801
1910	22,238	16,052	2,117	755	41,762
1911	25,763	17,605	2,083	762	46,213
1912	28,831	20,831	2,152	1,159	52,835
1913	33,133	21,896	2,340	1,219	58,582
1914	28,031	17,696	2,127	1,315	49,169

The following are the Loans in the hands of a public still existing, the others having been cancelled either by conversion or by exchange —

- (1) Three and a half per cent loan of 1812-13
- (2) Ditto
- (3) Ditto
- (4) Ditto
- (5) Three per cent loan of 1890-97
- (6) Three and a half per cent loan of 1900-01
- (7) Four per cent refundable loan of 1913-19

The first four of these loans were made repayable at the option of Government on or after 31st July 1901 on three months' notice being given so that the position now as regards these loans is that Government are at liberty to discharge them at any time on giving three months' notice. In view however of the necessity of such borrowings by Government this power is not likely to be exercised for some considerable time to come.

The 3½ per cent loan of 1900-01 is repayable, also at the option of Government, on or after 31st December 1920 on three months' notice being given and all loans issued since the year 1900 have been included in and form part of the 1900-01 loan.

In 1900 Government resolved in view of the emergency of borrowing at 3 per cent and the loan of Rs. 4 crores raised in that year was accordingly issued bearing that rate of interest.

The opportunity was also taken to advance for the exchange the two 3½ per cent loans of 1893-94 but proprietors of these loans were given the option of transferring their holdings to the new 3 per cent loan. The Rs. 4 crores loan was successfully floated and appears to be a great success but it was soon seen that the public had no use for a 3 per cent security and Government have never repeated the attempt to borrow at 3 per cent. The successful lenders for the loan of 1898-97 experienced great difficulty in disposing of any part of their holdings and as through course of time the notes became practically unmarketable it was generally felt that Government must do something to improve the market for the notes. Various proposals were submitted to Government with this end in view but the latter delayed taking any action in the form of giving holders the option of converting their 3 per cent notes into 3½ per cent notes of the 1900-01 loan on the following terms —

- (1) If the face value of the 3 per cent notes tendered for conversion is an exact multiple of Rs 700 the tenderer will receive in exchange 3½ per cent notes for 0·75ths of such face value
- (2) If the face value of the 3 per cent notes tendered for conversion does not form an exact multiple of Rs 700 the tenderer has the option of receiving —
- (a) 3½ per cent notes equivalent to the nearest lower multiple of Rs 700 calculated as in Clause 1 together with the difference in 3 per cent notes, or
- (b) 3 per cent notes equivalent to the nearest lower multiple of Rs 700 calculated as in Clause 1 on payment in cash of the difference between 0·75ths of the face value of the 3 per cent notes tendered and (ii) the face value of the 3½ per cent notes received in exchange.

Interest may be made payable at the option of the holder at the Public Debt Office Banks of Bengal, Bombay or Madras, at any Government Treasury, or at the Bank of England, London in the case of Promissory Notes, presented to the office where interest is payable is necessary before interest can be

(b) 3½ per cent notes of the nearest higher equivalent face value in hundreds calculated as in Clause 1 on payment in cash of the difference between 0·75ths of the face value of the 3 per cent notes tendered and (ii) the face value of the 3½ per cent notes received in exchange.

The above offer is still in force but Government have reserved the right to withdraw it at any time on giving 6 months' notice. The balance of the 3 per cent loan stood at Rs. 10,95 lakhs on 31st March 1897, at Rs. 11,07 lakhs on 30th September 1908 and at Rs. 5,42 lakhs on 31st March 1913. The work connected with the payment of interest, &c., on Government loans is entrusted to the Presidency Banks in the 3 Presidency towns, to the District Treasuries elsewhere in India, and to the Bank of England in London.

The 4 per cent refundable loan of 1913-1916 was issued at par in August 1913 and the loan if not previously redeemed will be repaid at par on 31st November 1923, Government however reserves the right to redeem the loan or any part of it at any time on or after the 30th November 1920 on giving three months' notice. A new departure was made when issuing this loan — the public were permitted to make applications through the Post Office for sums not exceeding Rs. 5,000. Such applications received allotment in full. The offer remained open until 30th Oct., and resulted in a further subscription of forty-four lakhs.

Government debt may be held in the form of promissory notes or Stock Certificates but Notes or Certificates can only be issued in even hundreds of rupees. Promissory notes are transferable by endorsement and as such loans that Government do not keep any record of the holders of such notes from time to time. A holder of a Stock Certificate is a registered holder however and transfers can only be made by transfer deed which must be submitted to and approved of by the authorities conducting the loan business on behalf of Government.

The question of issuing Bearer Bonds with or without coupons attached, is presently being considered by Government and it seems likely that this form of security will be issued in the near future.

Interest is payable half-yearly on each loan on the dates noted below

- Loan of 1812-43 1st February & 1st August
- Loan of 1854-55 30th June & 31st December
- Loan of 1865 1st May & 1st November
- Loan of 1879 16th January & 16th July
- Loan of 1896-97 30th June & 31st December
- Loan of 1900-01 30th June & 31st December

drawn but this does not apply as regards Stock Certificates and interest warrants in respect of these are sent out to the registered holder as soon as interest falls due. The interest on notes entrusted to London is paid by rupee drafts on India.

### Renewal, Conversion, Consolidation and Sub-Division of Promissory Notes

#### BENEFIT

When all the spaces reserved for endorsement on the reverse of a note have been filled up or when the spaces reserved for recording payments of interest have been exhausted the note requires to be renewed before any further transfers can be allowed or interest drawn. The fee for such renewal is at the rate of 1 per cent on the face value of the note subject to a maximum of Re 1 for each note but no renewal fee is charged in the case of a note on which no endorsements appear when the interest charges are expended.

#### CONVERSION

Promissory Notes of the 3 per cent loans of 1842-43, 1854-55, 1865, 1870 and 1900-01 may be transferred to any other of those loans except that no transfer to the loan of 1900-01 from any of the other loans is admissible.

It is made a condition however before any such transfer is permitted that a full half-year's interest is due on the Promissory Note at the time it is presented for transfer.

The fees charged are the same as those applicable to renewals.

#### CONSOLIDATION AND SUB-DIVISION

Notes of the same loan, on which interest has been paid up to the same date, may be consolidated or notes may be sub-divided into others of smaller denominations, but of the same loan, at the option of the promoters, notes only being issued for Rs 100 or multiples of Rs 100.

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1913  
1914  
1915

103 6 per cent  
105 7  
98  
95 13  
94  
95 10  
96  
93 14  
97 9  
95 2  
98 1  
97 14  
95 7  
96 3  
94 11  
93 7  
95 1  
96 2  
94 9  
95 10  
81 (Dec)

Rs  
Sterling Loan  
Rupee Loan  
117  
118  
117  
116  
110  
108  
108  
106  
105  
104  
102  
99  
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93  
91 7-16  
85  
Nominal

### Quotations for 3 per cent Government of India Loans

The fee charged is at the rate of 1 per cent on the face value of the new notes received, subject to a maximum of Re 1 for each note. The management of the debt in England is entrusted to the Bank of England who are paid commission at the rate of £300 per million pounds in respect of the sterling debt and £400 per crore of rupees in respect of the rupee debt. The charge for the latter is however subject to a minimum of £8,000.

## FAILURES OF INDIAN BANKS.

In the Indian Year Book for 1915 a full account was given of the disastrous failures of Indian banks, which commenced in 1913 and were continued throughout the greater part of the following year. Further, the statistics for complete details of this painful episode in the financial history of the country, reference must be made to that volume. The results of this acute commercial crisis are summarized below, and the liquidators' reports of the principal bank that failed, the Indian Specie Bank of Bombay, are appended.

(1) In the Punjab—The People's Bank of India, Lahore, the Popular Bank, Rawalpindi, the Orient Bank of India, Lahore, and the Punjab Co-operative Bank, Amritsar.

(2) In Bombay—The Indian Specie Bank, and the Credit Bank of India, and the Kathiawar and Ahmedabad Banking Corporation.

(3) In the United Provinces—The Bank of Upper India, Meerut, the failure of which took place recently. It was reconstructed.

Fifty seven banks failed, the authorized capital of which was Rs 9,92,00,000, the subscribed capital Rs 4,10,50,000 or 41 per cent of the authorized capital, and the paid-up capital Rs 1,44,39,000 or 14 per cent of the authorized capital. The greatest number of failures took place in March, 1914, when eight banks failed. In November, 1913, seven banks failed. The



The total number of creditors whose claims have been admitted in whole or in part is 16,442, and the total amount of claims admitted is Rs 1,55,20,410-14-3. Of the total number of creditors, the claims of 8,121 did not in any case exceed Rs 10, and the aggregate amount of their admitted claims was only Rs 26,119-12-3. In these circumstances the Hon Mr Justice Macleod, by his order dated 16th July 1915, made after due notice had been given directed that all creditors whose admitted claims do not exceed Rs 10 be paid in full. This will considerably lighten the burden and expense of the liquidation. In pursuance of that order Rs 3,657-13-1 have been paid to such creditors. In the cases of creditors, their admitted claims, amounting to Rs 8,588-5-3 have been held to be preferential and of these 13 have been paid in full, the amount so paid amounting to Rs 4,366 11 8.

On the 10th September 1914, suit No 966 of 1914 was filed in the High Court against the directors of the bank to recover the sum of Rs 1,66,64,494-0-6 being the aggregate of the losses sustained by the Company by reason of the misfeasance, neglect of duty, and breach of trust of defendants 1 to 7 and the late Choon-lal Dhanandas Varia and Lakhmasee Xapoo respectively as per particulars given and also 23,33,307 being the aggregate amount of the dividends and bonus for the years 1909, 1910, 1911, 1912, and 1913 wrongfully paid out of capital as per particulars given. The issues in this suit were settled in July last and the cases to come on for hearing after the October vacation.

On the 23rd October 1914, suit No 1217 of 1914 was filed against the auditors of the bank to recover the sum of Rs 23,33,077 with interest being the aggregate amount of the dividends and bonus wrongfully paid out of capital through neglect of duty by the defendants in not examining the accounts and reporting and correctly certifying the result of such examination. This suit is now on the daily board.

The position of the liquidation independently of anything which may be recovered in the suits against the directors and auditors is at present as follows:

Balance in Bank of Bombay on 7-9-15		Rs	
Balance in hand	17,458	4	1
Balance of cash with Shivali Vastial	2,54,000	0	0
Estimated value of pearls	15,00,000	0	0
Estimated value of shares	14,97,930	0	0
Estimated value of calls	20,00,000	0	0
Estimated further recovery of outstandings	8,72,000	0	0
Rs		1,04,00,339	1 0
A dividend at the rate of four annas in the rupee has been declared. This will absorb about Rs 38,71,425, leaving a further estimated balance of about Rs 65,12,000, independently of any amount that may be recovered from the			
Total		3,94	100
Others		11	3
Sugar factories		10	2
Breweries		18	4
Land and building		27	5
Coal mining		27	7
Rubber planting		8	2
Tea planting		18	4
Jute and other mills		14	4
Cotton mills		47	12
Trading		1,10	28
Railways		70	18
Insurance		40	11
Banking loan, and (Rs)		40	11
Authorised capital		100	100
Reserve		100	100

1914-15

Joint-stock Companies registered in

Joint-stock enterprise in India in the last official year received a serious setback, owing partly to war conditions and partly to the stringent measures of the new Indian Companies Act which came into force in April 1914. Returns compiled in the DEPARTMENT OF STATISTICS show that only 107 Companies were registered with an authorised capital of Rs 3,94 lakhs against 340 Companies and Rs 66,64 lakhs in 1913-14, and 284 Companies and Rs 12,19 lakhs in 1912-13. Five Companies were registered with an authorised capital of Rs 20 lakhs and above, seven with 10 lakhs and under Rs 20 lakhs, and eighteen Companies from Rs 4 lakhs to 8 lakhs. The capital invested was distributed amongst the different industries as shown below —







# AGRICULTURAL PRODUCE.

The following table shows the area under the principal crops, in British India, and their territorial distribution for 1912-13. The cropped area is always greater than the area of cultivated land, owing to double cropping. The figures (which are preliminary) represent thousands of acres.

Province	Rice	Wheat	Bark	Other food grains (Millet and Pulses)	Total food grains and Pulses	Oilseeds	Sugar Crops	Cotton	Indigo	Total cropped Area	Net cropped Area after deducting area cropped more than once
Bengal	10,735	144	94	1,602	21,673	1,803	277	26	2,716	29,690	21,209
Bihar and Orissa	3,735	6,377	4,377	15	4,880	391	3	3	101	6,110	5,407
Assam	6,140	8,473	970	15,004	32,658	784	1,180	1,748	101	38,769	12,700
United Provinces	800	1,031	201	9,438	10,681	1,179	111	1,828	101	27,128	26,041
Punjab	44	21	1,610	2,406	11,065	1,482	32	60	14,074	27,308	25,249
N W Frontier Province	10,331	25	10,373	17,892	29,440	2,348	40	300	2,812	44,115	24,470
Burma	4,086	25	18,735	20,440	3,177	162	4,231	50	20,130	34,181	303
Central Provinces and Berar	10,078	20	60	17,218	1,370	6	4,231	50	20,130	34,181	303
Madras	2,708	1,840	303	21,870	1,370	6	4,231	50	20,130	34,181	303
Bombay and Sind	83	20	60	222	303	37	4,231	50	20,130	34,181	303
Minor Arcs	60,320	20,476	6,841	70,217	102,000	12,675	2,432	15,603	2,817	21,7556	107,065
Total											

\* Figures for Minor Arcs are for 1912-13.

Agricultural Produce





most common product but a certain amount of yellow leaf is grown for cigar making

**LIVE-STOCK**—Consists mainly of cattle, buffaloes and goats, horses not being used for agricultural purposes. Sheep are of secondary importance.

For draught purposes cattle are in more general use than buffaloes especially in the drier parts of the country, but buffaloes are very largely used in the low lying rice tracts. For dairying buffaloes are perhaps more profitable than cows as they give richer milk and more of it but they require more feeding. The poorer people depend largely on the milk of goats of which there are an enormous number throughout India. Cattle breeding is carried on mainly in the non-cultivated tracts in Central and Southern India, Southern Punjab and Rajasthan, where distinct breeds with definite characters have been preserved. The best known draught breeds are Hansi, Nellore, Amritmehal, Gujrat, Malvi, and the finest milk cows are the Sahiwal (Punjab) Gir (Rajasthan) and Sind Owing however, to the encroachment of cultivation on the grazing areas well-bred cattle are becoming scarce, efforts to improve the quality of the cattle in the non-breeding districts by the use of selected bulls have hitherto been frustrated by the promiscuous breeding which goes on in the villages.

**Dairying**—Though little noticed, dairying forms a very large indigenous industry throughout India. The best known products are native butter (ghee) and cheese (dahi). During recent years a considerable trade in tinned butter has sprung up in Gujrat (Bombay Presidency). While pure ghee and milk can be produced in the villages, in the towns dairy products can scarcely be bought unadulterated.

In Madras, Bombay and the United Provinces, and the Economic Botanist in Madras was the only provincial representative of the more specialised type of appointments. Within the next few years a number of new appointments were made, so that by March 1906 there were altogether 20 sanctioned agricultural posts, or these seven were Imperial, including a number of specialist appointments attached to the Agricultural Research Institute and College, the establishment of which at Pusa in Bengal was sanctioned in 1903. A great impetus was given to the development of the Agricultural Department by the decision of the Government of India in 1905 to set apart a sum of 20 lakhs (£1,300,000) a year for the development of agricultural experiment, research, demonstration and instruction. Their ultimate aim, as then expressed, was the establishment of an experimental farm in each large tract of country in which the agricultural conditions are approved-ly numerous small demonstration farms, the Directors of Agriculture were employed only

## AGRICULTURAL PROGRESS.

The Agricultural Departments in India as they now exist may be said to be a creation of the last ten years. There have for a good many years past been experimental farms, under official control, in various parts of India, but they were in the past to a large extent in the hands of amateurs, and the work of the Agricultural Departments, with which all the major provisions were provided by about 1884, was in the main confined to the simplification of revenue settlement procedure and the improvement of the land records system. In 1901 the appointment of an Inspector-General of Agriculture gave the Imperial Agricultural Department for the first time an expert head, and placed the Government of India in a position to coordinate the work being done on independent lines in various provinces. At that time the staff attached to the Government of India consisted of an Agricultural Chemist and a Cryptogamic Botanist, while trained Deputy Directors of Agriculture were employed only

required for *Hooka* smoking and this is the of tobacco are obtained. A black tobacco is fermentation of the leaves different qualities become brittle. By varying the degree of onwards and is cut just before the leaves are removed. The crop ripens from February attaining a height of, say, 2 ft., and all suckers carefully weeded and hoed. It is topped after shield them from the sun. The crop is very a few inches high, great care being taken to and the young plants are transplanted when great. The seed is germinated in seed beds tion necessary for its proper cultivation is very holding where labour is plentiful as the attention necessary. The crop is only suited to small dard of cultivation including liberal manuring deep and moist alluvium soils and a high steam most common *Nicotiana glauca* is by far the best cultivated *Nicotiana glauca* and *Nicotiana glauca* are cultivated in Bengal, Bihar, Bombay, Madras and Burma. Of two varieties the country chiefly, however, in Bengal, Bihar, the *Nicotiana glauca* is grown here and there all over

considered to be the best paying crop in India. present high range of prices just may be considered by washing and beating. At the removed by three weeks submergence in water. After the crop is cut and retted in water. Before ripening great height (10 to 12 feet). The crop is rather delicate when young, but once established requires no attention, and grows to a year and the land is thus able to sustain this receives a considerable alluvial deposit every Owing to river inundation this part of India Delta. The crop requires a rich moist soil Eastern Bengal, in the Ganges-Brahmaputra into growing is confined almost entirely to vated as a crop, Capsularis and Ollitorius. **Note**—Two varieties of the plant are cultivated as a crop, Capsularis and Ollitorius. cake being in demand for feeding purposes. The is largely exported whole, but there is a considerable amount of local oil-pressing—the care has to be taken in the drying. The produce is very subject to injury from rain and great

	1900-7	1907-8	1908-9	1909-10	1910-11	1911-12	1912-13
Area under Oilseeds—							
Linseed	2,611,884	1,401,220	1,081,826	2,110,281	2,612,042	3,763,222	3,127,067
Sesamum (oil)	3,908,128	1,287,722	4,232,608	1,740,002	4,211,820	4,171,741	4,161,915
Rape and Mustard	4,211,651	3,297,155	3,887,122	4,093,630	3,805,746	1,224,746	3,655,300
Other Oilseeds	3,101,600	3,400,670	4,004,082	3,075,001	3,011,023	1,132,600	4,001,365
Total Oilseeds	13,906,305	12,485,071	14,105,698	14,025,067	14,631,230	16,191,805	17,035,780
Area under—							
Cotton	1,771,208	13,000,260	12,058,071	13,172,188	14,117,030	14,688,189	14,168,407
Jute	3,621,668	5,912,076	2,516,161	2,760,820	2,828,009	3,030,827	3,323,071
Other fibres	602,481	740,000	722,718	924,060	769,604	698,808	805,011
Jingo	448,601	405,905	280,651	205,706	282,767	274,926	227,016
Opium	611,879	638,012	116,318	171,208	181,637	220,104	107,714
Tobacco	1,000,210	974,468	951,712	1,013,452	1,067,082	908,911	901,729
Horticultural crops	4,647,723	1,008,324	4,627,878	4,718,809	1,881,742	4,077,024	5,770,406
Estimated yield* of—							
Rice (domestic)	127,743,800	370,211,300	300,070,800	567,130,000	557,938,000	521,002,000	520,021,000
Wheat	8,401,700	6,125,100	7,610,000	9,613,000	10,040,600	9,811,500	9,500,700
Cotton†	17,777,032	31,042,127	27,618,157	34,083,609	†	4,811,500	5,200,700
Jute†	241,404,610	241,068,073	247,101,760	268,317,942	261,006,240	208,821,436	205,063,683
Cotton	4,034,000	3,782,401	4,200,150	1,028,000	4,103,000	3,925,000	1,326,000
Jute	0,200,400	0,817,800	0,310,150	7,200,000	7,032,000	8,214,700	0,521,800
Tansool	425,200	103,200	297,700	427,800	661,000	0,11,200	616,700
Rape and Mustard	1,063,100	688,000	987,500	1,218,100	1,233,200	1,271,000	1,220,400
Sesamum (oil)	561,000	285,700	164,300	260,800	511,800	371,400	471,700
Groundnut	271,700	352,600	405,700	150,900	503,200	612,200	631,400
Indigo	07,700	62,400	38,800	49,800	40,000	48,700	37,600
Cane-sugar	2,206,300	2,016,000	1,872,000	2,127,100	2,217,800	2,390,400	2,662,000

\* The average of crops given in this table is for British India only, but the estimated yield includes the crops in certain of the Native States

† The statistics of the production of jute are for calendar years, those for cotton were for calendar years before 1908-9

‡ Return of production discontinued

creation of an agricultural college teaching up to a three years' course in each of the larger provinces and the provision of an expert staff in connection with these colleges for purposes of research as well as education. The eventual cost, it was recognised, would largely exceed 20 lakhs a year. The Pusa Research Institute and College alone has cost nearly £150,000 including equipment. A part of the cost was met from a sum of £30,000 placed at Lord Curzon's disposal by Sir Philipps, an American visitor to India. This example of munificence has recently been followed by Sir Sassoon J David, who placed the sum of £53,300 at the disposal of the Government of Bombay for the establishment of vernacular agricultural schools and the improvement of agricultural methods, in commemoration of the visit of Their Imperial Highnesses to India.

## Record of Progress

At the beginning of 1912 there were over 40 posts in the Indian Agricultural Service, besides that of Inspector-General, which was abolished at the end of the year 1911-12, the rapid advance of the provincial departments having rendered its continuance unnecessary. The officers serving directly under the Government of India included the Director of the Pusa Institute, who was also Principal of the Agricultural College, a cotton specialist, two mycologists, three entomologists, two agricultural chemists, and an economic botanist. Some of these were supernumerary officers undergoing training. The provincial agricultural departments vary in strength. Generally speaking each of the larger provinces has at least a Deputy-Director of Agriculture (most provinces have two), an agricultural chemist, and an Economic Botanist. In several provinces the principalship of the Agricultural College is a separate appointment and among the remaining officers are a fibre expert in East-Ceylon, Bengal and Assam, and a "scientific officer for planting industries in Southern India." The Government of Madras have also a mycologist and an entomologist of their own. The posts so far referred to have hitherto necessarily been filled almost exclusively by the appointment of trained specialists from the United Kingdom. There are also in the various provinces a considerable number of locally appointed Assistant Professors (in the Agricultural Colleges), Assistant Agriculturalists and Entomologists, Assistant Inspectors, Superintendents of Farms, etc., and subordinate officers. It is an essential part of the scheme adopted that facilities for the best agricultural training shall be made available in India, in order that the country may become self-supporting, so far as possible, in regard to the scientific development of agricultural methods on lines suited to local conditions. Provincial agricultural colleges, which are also research stations, have within the last few years been established in Madras, Bombay, Bengal, the United Provinces, the Punjab and the Central Provinces. The Central College at Pusa is intended to provide for more advanced training, and gives also short practical courses in subjects not at present taught in the provinces.

## Work of the Departments

The work of the Agricultural Department has two main aspects. On the one hand by experiment and research, improved methods or crops are developed, or the means of combating a pest are worked out, on the other hand, ascertained improvements must be demonstrated and introduced as far as possible into the practice of the Indian cultivator. There is an essential difference between agricultural departments in the East and in the West in that, whereas the latter have wisdom to meet the spontaneous demands of the cultivators of the soil, the former are entirely the creation of a government anxious to give all the assistance it can to its agricultural subjects. The demand for improved agriculture has not in India, except in special cases, come from the cultivators, and it is necessary for the Department to put forth every effort, first to ascertain the needs of the cultivators and then to demonstrate how they can most effectively be met. It is only a few years since work on modern lines was commenced by the reorganised agricultural departments, and, in the first place, a great deal of spadework had to be performed.

## Cotton

Cotton from the first received much of the attention of the new departments. Very striking results have already been achieved, and more particularly with *Cambodia* and other exotic varieties. The second line of improvement is the separation and selection of indigenous varieties. In Madras the efforts of the Agricultural Department have resulted in the spread of the local improved variety called *Karungy* in the Tanjore District and white seeded *Delipathi* cotton in Burmo

AREA, CULTIVATED AND UNCULTIVATED, in 1912-13, in ACRES

Administrations	Area according to Survey	Feudatory and Tributary States	Area for which no Returns exist	Total	According to Survey		NET AREA
					According to Village	Papers	

Bengal	53,931,504	3,451,520		3,451,520	50,479,984	50,479,984	
Bihar and Orissa	71,418,217	18,334,720	18,334,720	18,334,720	53,083,497	53,083,497	
Assam	39,273,404	7,069,020	7,069,020	7,069,020	32,204,384	32,204,384	
United Provinces	57,372,937	1,345,232		1,345,232	56,027,705	56,027,705	
United Provinces (Azamgarh)	15,000,720				15,000,720	15,000,720	
Punjab (United)	86,067,319	24,511,334		24,511,334	61,555,985	61,555,985	
North-West Frontier Province	8,578,499	140,800		140,800	8,437,699	8,437,699	
Upper Burma	57,802,617	3,997,722		3,997,722	53,804,895	53,804,895	
Lower Burma	54,909,711				54,909,711	54,909,711	
Central Provinces	72,532,216	19,980,443		19,980,443	52,551,773	52,551,773	
Bihar	11,328,700				11,328,700	11,328,700	
Almora-Merwar	1,770,721				1,770,721	1,770,721	
Coorg	1,012,260				1,012,260	1,012,260	
Madras	97,448,741	6,478,899		6,478,899	91,069,842	91,069,842	
Bombay	83,620,515	36,970,200		36,970,200	46,650,315	46,650,315	
Sind	34,143,132	3,872,000		3,872,000	30,271,132	30,271,132	
Pargana Manipur	31,382				31,382	31,382	
Total	748,868,885	129,941,740		129,941,740	618,927,145	618,927,145	

Administrations	Net Area actually Cropped	Current Fallows	Cultivable Waste other than Fallow	Not available for Cultivation	UNCULTIVATED		Forests
					Cultivated	Uncultivated	
Bengal	25,954,900	4,914,369	5,201,098	10,152,627	4,256,990	4,256,990	
Bihar and Orissa	27,122,100	3,388,166	7,868,360	9,933,802	4,741,048	4,741,048	
Assam	3,253,383	2,592,200	15,084,513	5,510,500	2,343,028	2,343,028	
United Provinces	26,784,225	2,172,519	7,484,283	7,645,164	8,717,421	8,717,421	
United Provinces (Azamgarh)	9,278,458	584,862	2,776,589	2,227,357	613,183	613,183	
Punjab (United)	34,159,016	3,527,685	17,416,085	12,986,292	3,348,481	3,348,481	
North-West Frontier Province	2,140,107	697,675	2,734,926	2,627,083	374,676	374,676	
Upper Burma	4,983,705	4,207,274	10,762,018	21,533,089	12,238,510	12,238,510	
Lower Burma	9,034,260	610,559	14,750,918	25,578,682	6,970,292	6,970,292	
Central Provinces	17,683,822	2,566,032	13,565,064	4,097,175	14,912,335	14,912,335	
Almora-Merwar	359,467	119,970	161,366	893,442	2,162,093	2,162,093	
Coorg	140,257	162,897	20,870	330,449	357,795	357,795	
Madras	34,605,907	8,210,373	9,963,993	23,047,490	12,814,759	12,814,759	
Bombay	25,180,263	3,318,918	1,525,233	6,021,149	7,575,752	7,575,752	
Sind	3,990,570	5,197,596	5,633,387	14,000,919	798,660	798,660	
Pargana Manipur	7,293	287	6,894	878	16,025	16,025	
Total	224,163,802	48,760,338	113,024,857	146,086,582	82,400,351	82,400,351	

\* British district in Central India

Another crop with which considerable success has been attained is **Groundnut**, the cultivation of which had at the beginning of the decade fallen off, owing partly to the prevalence of a harmful disease and partly to defective methods of cultivation. In Bombay, and in Burma, it has been introduced with extraordinary rapidity.

Another success of marked importance achieved by the efforts of the provincial agricultural departments is the introduction of **agribusiness** and **marketing** to the conditions of different provinces. Information and assistance in regard to the choice of implements suitable for various conditions has, under present circumstances, to be interpreted and brought home to Indian cultivators by a more direct agency than business firms, and the agricultural departments have therefore to do a good deal of this work. They have succeeded already in introducing various kinds of implements in different parts of the country. Every assistance is given in the use and repair of implements recommended up to the present, the departments perform to a certain extent the functions of dealers in implements, but it is becoming difficult to control the work as the area covered by the introductions is gradually becoming large, and a need for the development of co-operative societies is felt in Bombay, the Department has introduced ploughs of various patterns and is selling a larger number each year in some provinces. Iron ploughs are becoming very popular. The possibilities of improved harrows, cultivators, and clod-crushers are also receiving attention.

Both of these varieties having been selected from among the mixtures ordinarily grown in the district, a system of seed distribution was gradually built up, and now, after five or six years' work, there is a vast area under the Department supplies pure seed to contract seed growers and buys the seed-cotton from these men, plants it, and arranges the distribution of seed through village depots. In Bombay, two have been selected as the best out of many hybrids and pure line cottons bred and tried for many years on the Surat farm. They give a distinct advantage both in quantity and quality over the ordinary local cotton, and promise to sell at rates 5 per cent higher. In another part of the province arrangements are being made to distribute on a large scale seed of another improved form, which can be grown, it is estimated, over 1,800,000 acres in the Southern Maratha Country. Broach cotton, introduced by the Department, is gaining favour. There is said to be scope for 250,000 acres, and the increased profit to the cultivator is estimated at £1 or more per acre. In the Central Provinces also, two indigenous varieties have been selected in the United Provinces seed of a superior variety is being distributed. Wheat also has been the subject of prolonged experiments. One of the first results of the investigations carried out at Pusa, was the demonstration of the fact that varieties with milling and baking qualities similar to those of the best wheats, the English market could be grown to perfection in Bihar. By the application of modern methods of selection and hybridisation these high grain qualities were successfully combined with high yielding power, rust-resistance and strong straw.

## TEN YEARS' PROGRESS.

crop improvement have naturally been dealt with first, but given more men and more money all the crops of India will be taken up.

"Money spent on agriculture is a good investment, but material results are difficult to gauge. Many factors have to be considered, a whole industry threatened by destruction may be saved by the discovery and application of preventive and protective methods. The treatment of the palm industry and areca-nut industry of Malaya and the protection of the potato crop of Patna are illustrations of this kind. Again, there are the direct gains following the introduction of new or improved crops, implements, well-boring and improved methods of cultivation. We may, at a conservative estimate, claim that the increase to the value of the labour of the Agricultural Departments of India as a result of the agricultural products of India is already about 3 crores of rupees annually, or £2,300,000. This is the result of only ten years' work, and it must be remembered that every year will show a progressive increase. On the debit side we have an annual expenditure on agriculture which has risen from Rs 8,81,124 or £38,742 in 1904-05 to Rs 51,30,652 or £3,12,011 in 1913-14."

The Agricultural Departments are now re-garded as an integral and important part of the administration. The few European and Indian workers of 1905-198 in all—now numbered 866. Their labours are concentrated and coordinated. They now work on general schemes of development. Farms and demonstration plots, formerly scattered and disconnected, have increased from 55 to 374, and work on them is concentrated on the main problems, and not dissipated as used to be the case over a number of subsidiary and unimportant enquiries. "As a result the Department can claim credit for a great advance in general agricultural practice. Cultural and manual problems have in many cases been improved, or better implements introduced. Real and substantial work has been done on the improvement of such important crops as wheat, cotton, rice, sugar-cane and tobacco. The general principles of

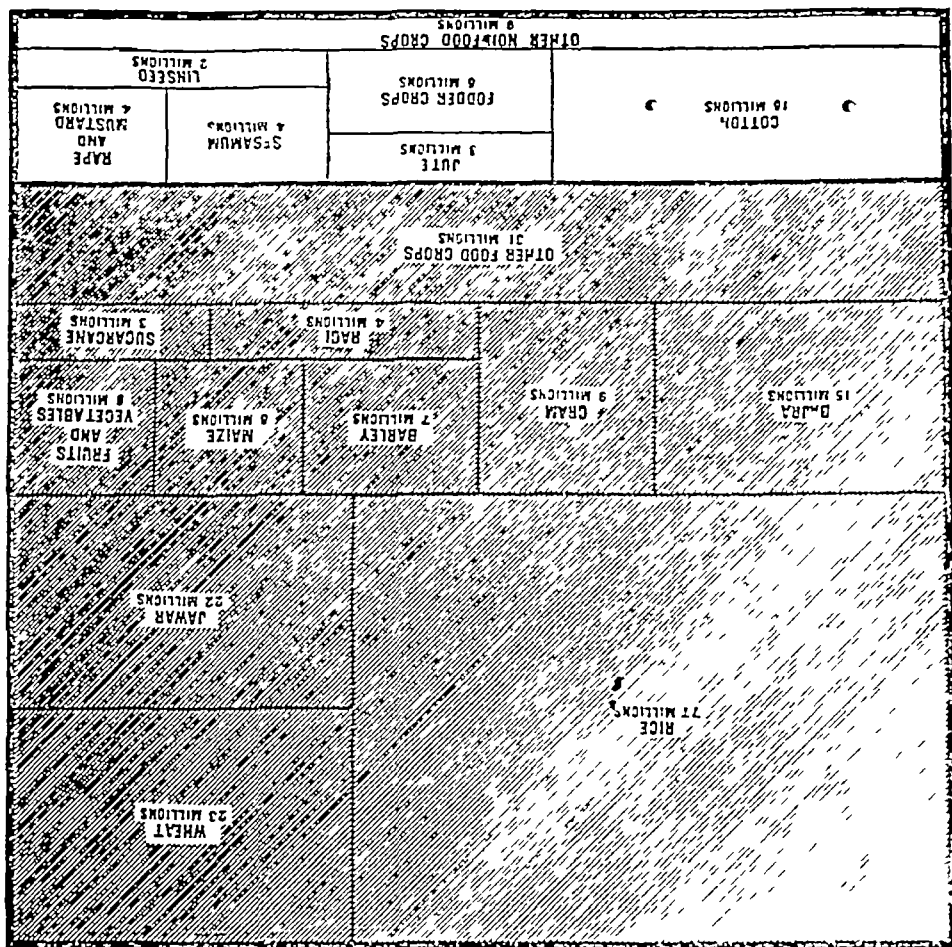
In 1915, Mr James MacKenna, I.C.S., Director of Agriculture in Burma, published a brochure in which he reviewed the progress in Agriculture in India in the last ten years. In this, reviewing the effects of the work of the new Agricultural Departments, he said—



# TOTAL AREA CROPPED IN 1915 14.

(BRITISH INDIA)

Total Area cropped 217 million acres  
 Area under food crops (shaded) 203 million acres.  
 Area under non food crops (unshaded) 14 million acres



NOTE.—"Other food crops" are minor food-grains, condiments and spices, and miscellaneous food crops  
 "Other non food crops" are oilseeds other than sesamum, linseed, rape and mustard, fibres other than cotton and jute, dyes, drugs and narcotics, and miscellaneous non food crops

## AREA, UNDER IRRIGATION IN 1912-13 IN ACRES

Administrations	Total Area Cropped	By Canals			AREA IRRIGATED		
		Private	Govern- ment	By Wells.	CROPS IRRIGATED *		
					Miscel- laneous Food Crops	Other Pulses and Crops	Other Crops
Bengal	30,198,300	113,763	113,763	20,160	816,340	218,321	20,160
Bihar and Orissa	33,178,400	971,176	971,176	721,868	1,219,384	632,693	721,868
Assam	6,273,825	978	107,458	3,094,984	45,700	107,458	3,094,984
United Provinces (Agra)	32,812,902	2,234,207	2,234,207	1,523,393	45,700	22,530	1,523,393
United Provinces (Oudh)	12,118,835	7,026,031	7,026,031	3,601,682	12,214	493,455	3,601,682
Punjab	27,519,231	241,079	241,079	92,225	1,214	454,516	92,225
North-West Frontier Pro- vince	2,519,231	241,079	241,079	12,193	180,286	187,759	12,193
Upper Burma	5,397,014	480,745	480,745	17,193	180,286	187,759	17,193
Lower Burma	9,039,533	230	230	2,433	2,775	23,080	2,433
Central Provinces	19,434,783	22,228	22,228	67,911	766,207	4,651	67,911
Berar	6,952,070	4	4	30,681	177	766,207	30,681
Ajmer-Merwara	395,298	2,610	2,610	90,100	32,731	1,750	90,100
Coorg	141,343	2,610	2,610	1,582,270	3,613,313	238,930	1,582,270
Madras	38,119,874	3,559,796	3,559,796	578,557	123,886	17,719	578,557
Bombay	26,138,281	186,691	186,691	38,937	123,886	17,719	38,937
Mad	4,287,061	2,924,783	2,924,783	38,937	426	78,522	38,937
Pargana Manipur	7,650	2,924,783	2,924,783	207	426	78,522	207
Total	253,356,431	17,764,317	17,764,317	12,350,801	6,825,189	2,492,623	12,350,801

Administrations	Other Sources	Total Area Irrigated	Wheat	Other Cereals and Pulses	Miscel- laneous Food Crops	AREA IRRIGATED		
						CROPS IRRIGATED *		
						Miscel- laneous Food Crops	Other Pulses and Crops	Other Crops
Bengal	1,053,541	2,224,125	23,394	1,997,484	539,239	141,100	539,239	141,100
Bihar and Orissa	1,259,659	4,804,770	254,110	2,918,683	1,324,985	200,623	1,324,985	200,623
Assam	247,482	355,918	340,986	14,234	14,234	698	14,234	698
United Provinces (Agra)	1,146,862	7,444,283	2,371,537	3,783,968	133,340	1,617,050	133,340	1,617,050
United Provinces (Oudh)	168,622	2,202,091	824,404	1,163,793	40,525	288,062	40,525	288,062
Punjab	168,622	11,302,184	4,694,907	2,735,037	486,259	3,673,552	486,259	3,673,552
North-West Frontier Pro- vince	85,795	873,615	272,211	410,245	53,205	142,072	53,205	142,072
Upper Burma	96,787	967,770	157	960,173	42,554	106	42,554	106
Lower Burma	95,319	123,856	110,038	110,038	14,034	4,496	14,034	4,496
Central Provinces	38,894	905,894	15,561	550,527	303,310	1,358	303,310	1,358
Berar	693	31,551	8,195	1,575	20,425	1,358	20,425	1,358
Ajmer-Merwara	92	122,923	11,807	69,022	27,369	34,302	27,369	34,302
Coorg	4,360	4,360	4,360	4,360	34,302	34,302	4,360	34,302
Madras	903,441	9,897,750	4,122	9,901,681	1,185,141	488,885	1,185,141	488,885
Bombay	95,880	1,003,733	200,609	367,285	160,059	180,710	160,059	180,710
Mad	233,381	3,274,044	40,230	2,544,542	48,283	365,785	48,283	365,785
Pargana Manipur	207	3,274,044	153	2,544,542	48,283	365,785	48,283	365,785
Total	6,106,144	45,539,074	9,034,400	28,091,594	4,643,968	7,339,417	4,643,968	7,339,417

\* Includes the area irrigated at both harvests

Administrations	Rice	Wheat	Barley	Jawar or (Great Millett)	Bajra or (Spiked Cumbu)	Ragi or (Millett)
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Total	United Provinces (Agra)	United Provinces (Oudh)	Y West Frontier Province	Upper Burma	Lower Burma	Central Provinces	Ajmer-Merwara	Coorg	Madras	Bombay	Sind	Pargana Manipur
21,166,000	16,074,900	2,474,835	2,411,901	2,005,713	8,199,042	4,968,218	31,397	409	10,943,735	1,860,110	1,087,525	136
146,300	1,177,400	2,007,004	8,706,689	25,597	16,326	304,951	27,137	18,327	1,201,941	456,882	1,629	
94,800	1,332,700	1,162,753	1,006,715	214,679	28,380	69	3,460	5,219,753	28,976	20,169	3	
3,200	122,300	318,441	1,212,222	516,023	1,621,729	2,266,670	61,346	3,606,349	7,074,559	7,063,404	2,584	
7,200	93,100	2,133,831	2,676,833	239,952	48,862	104,845	31,340	2,599,958	5,496,435	1,140,856	39	
16,300	938,100	1,927	66,771	20,262	5	13,543	26	5,081	636,287	613		
4,455,537	10,268,801	78,752,497	23,861,183	7,420,333	20,967,730	10,268,801	4,455,537					

Administrations	Majze	Gram (pulse)	Pulses and other Food Grains	Total Food Grains and Pulses	Un-seed	Mill or Seed-amm
Bengal	97,400	184,100	1,345,300	23,060,600	199,800	251,200
Bihar and Orissa	1,771,800	1,286,000	5,688,000	23,484,800	677,200	228,400
Azam	171,970	915	92,544	4,761,379	12,615	10,470
United Provinces (Agra)	1,378,557	4,022,703	4,936,632	27,132,565	340,169	297,197
United Provinces (Oudh)	829,403	1,484,783	2,283,450	11,112,108	153,314	19,996
Punjab	1,097,989	3,400,919	1,481,810	20,405,340	43,313	157,928
N West Frontier Province	1,097,989	168,953	121,453	2,194,904	15	9,467
Upper Burma	160,084	33,004	38,053	3,168,458	1,410,579	1,142,073
Lower Burma	24,085	1,387	9	8,222,133	1,198	72,909
Central Provinces	147,730	1,003,026	3,781,391	14,905,429	98,153	694,917
Berar	1,691	113,034	645,118	3,468,083	83,044	83,044
Ajmer-Merwara	68,484	9,257	40,077	286,656	22,466	33,309
Coorg	133,930	139,493	8,075,612	30,739,617	22,466	812,876
Madras	163,865	499,849	2,687,776	19,709,248	163,865	280,915
Bombay	1,501	75,499	228,738	3,015,157	24	68,634
Sind	1,081	650	60	6,182	34	446
Pargana Manipur	6,316,089	12,422,848	30,907,560	201,372,578	3,125,067	4,164,045
Total						

## CROPS UNDER CULTIVATION IN 1912-13 IN ACRES

Administrations		Rape and Mustard.	Other Seeds	Total Oil Seeds	Condiments and Spices	Sugar Cane	Sugar Other
Bengal		1,325,400	45,800	1,822,200	143,300	221,800	49,800
Bihar and Orissa		724,600	543,700	2,173,900	92,700	270,700	300
Assam		298,416	136	321,416	2,880	35,928	
United Provinces (Agra)		75,144	58,120	770,630	98,256	1,174,637	
United Provinces (Oudh)		72,487	1,804	247,601	16,132	249,407	
Punjab		887,781	4,668	1,093,090	7,871	367,373	
N West Frontier Province		79,620	40	1,89,142	5,210	29,879	
Upper Burma		281	*192,976	1,330,335	64,041	3,046	24,238
Lower Burma		3,351	*5,727	81,987	21,533	11,168	1,047
Central Provinces		42,229	388,604	2,536,629	53,934	24,805	
Berar		441	59,392	241,032	22,036	1,003	
Ajmer-Merwara		1,231	35,728	35,728	2,043	210	
Coorg		18	2,107,153	2,942,495	632,436	98,888	87,992
Madras		4,295	531,409	982,484	183,246	53,728	487
Sind		41,237	149,261	239,156	8,882	8,835	2,141
Pargana Manipur			381	831		5	
Total		3,555,300	4,091,368	14,935,780	1,390,237	2,546,522	165,563
Bengal		26,200	2,927,100	35,900	2,989,200	1,000	9,800
Bihar and Orissa		87,200	298,500	20,600	406,300	90,400	1,186
Assam		36,052	98,351	311	134,714	22,930	16
United Provinces (Agra)		1,059,446		115,133	1,174,579		
United Provinces (Oudh)		59,933		24,064	88,997	4,591	210
Punjab		1,442,929		54,787	1,497,716	38,089	2,027
N W Frontier Province		53,104		738	53,842	36	
Upper Burma		208,787		366	209,153	128	4
Lower Burma		32,267		355	32,622	1	72
Central Provinces		1,355,205		35,691	1,440,896	18	
Berar		3,138,394		54,378	3,192,772	3	27
Ajmer-Merwara		49,191		141	49,322	27	
Coorg		8		114	122		
Madras		2,388,998		290,708	2,679,706	66,552	2,678
Sind		3,910,845		121,720	4,032,565	25	395,521
Pargana Manipur		287,375		868	288,243	3,271	508
Total		14,138,497	3,323,951	805,111	18,268,359	227,046	412,109

Administrations	Opium	Coffee	Tea	Tobacco	Other Drugs and Narcotics	Foodstuffs
Bengal	100,014	1		313,700	2,800	115,800
Bihar and Orissa				106,300		22,100
Assam				8,992		4,641
United Provinces (Agra)				68,135		970,095
United Provinces (Oudh)	94,525			13,554	1,010	143,836
Punjab	7,545			47,451		3,650,287
N W Frontier Province				8,737	461	92,588
Upper Burma	200	60	1,722	29,670	3,642	32,509
Lower Burma		4		58,458	36,196	1706
Central Provinces				18,216	260	369,174
Berar				11,450	77	712
Ajmer-Merwara				40		7,274
Coorg	42,510			23	255	233,217
Madras	49,287			205,599	49,643	100,295
Bombay	51		14	71,942	24,946	11,232
Sind				7,456	97	
Pargana Manipur						
Total	197,314	91,913	557,856	964,726	119,087	5,770,466

Administrations	Fruits and Vegetables, including Crops	Food		Non-Food	Total Area Cropped	Deduct Area Cropped more than once	Net Area Cropped
		Food	Food				
Bengal	824,300	450,500	350,700	30,498,300	4,545,400	25,954,900	25,954,900
Bihar and Orissa	766,300	490,300	262,800	33,178,400	6,056,300	27,122,100	27,122,100
Assam	400,443	42,638	72,876	6,273,825	430,467	8,825,333	8,825,333
United Provinces (Agra)	255,176	137,791	35,522	32,312,902	5,528,674	26,784,228	26,784,228
United Provinces (Oudh)	94,486	55,813	2,575	12,118,855	2,840,377	9,278,458	9,278,458
Punjab	257,431	82,753	16,666	27,510,227	3,351,006	24,159,016	24,159,016
N W Frontier Province	519,638	59,177	3,883	2,549,281	409,124	4,963,703	4,963,703
Upper Burma	446,207	120,466	3,525	5,397,014	433,311	4,963,703	4,963,703
Lower Burma	87,335	2,361	631	19,434,783	1,750,961	17,683,822	17,683,822
Central Provinces	11,413	2,230	248	6,952,079	13,143	6,938,930	6,938,930
Berar	556	7,494	938	395,298	38,835	356,463	356,463
Ajmer-Merwara	4,628	143,528	141,343	39,119,874	1,090	34,605,903	34,605,903
Coorg	550,412	2,076	26,138,281	958,018	25,180,263	3,990,570	3,990,570
Madras	41,753	101	45,326	4,287,061	296,491	3,990,570	3,990,570
Bombay	1,245	143,528	141,343	39,119,874	1,090	34,605,903	34,605,903
Sind	2,076	143,528	141,343	39,119,874	1,090	34,605,903	34,605,903
Pargana Mamluk	255,256,431	1,067,975	255,256,431	31,150,829	224,165,602		
Total	5,465,857	1,382,403	1,067,975	255,256,431	31,150,829	224,165,602	224,165,602

**Crop Forecasts for 1915-16**—The following is a summary of the various crop forecasts relating to the season 1915-16 issued by the Department of Statistics, India, and published in the *Indian Trade Journal* on the dates mentioned in the last column —

Crop	Tracts comprised in the figures and percentage of total Indian crop represented by them	Estimated Area	Per cent of five years average (100 = average of five years at corresponding date)	Per cent of five years average (100 = average of five years at corresponding date)
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Sugarcane	U P, Punjab, Bihar and Orissa, Bengal, Madras, Bombay and Sind, * Assam, N-W F Pro- vince, and C P and Berar (88 per cent of total sugarcane area of British India)	2,508,000 Acres	105	Per cent
Cotton	U P, C P and Berar, Madras, Bombay and Sind, * Bengal, Bihar and Orissa, Punjab and Ajmer-Merwara (78 per cent of total cotton area of British India)	16,253,000	82	Per cent
Indigo	Practically all Indigo growing tracts	258,100	153	Per cent
Rice	Bengal, Bihar and Orissa, Madras, Burma, U P, C P and Berar, Bombay and Sind * and Assam (99 per cent total rice area of British India)	74,431,000	117	Per cent
Groundnut	Madras, Bombay* and Burma (99 per cent of total groundnut area of British India)	1,742,000	149	Per cent

\* Including Native States

## THE CIVIL VETERINARY DEPARTMENT.

To the Civil Veterinary Department, which originated in 1892 as an expansion of the military horse-breeding department, is entrusted the performance or supervision of all official veterinary work in India, other than that of the Army. Its duties fall under the main heads of cattle disease and cattle breeding, horse and mule breeding, and educational work in veterinary colleges.

In 1905 and the following years both the superior and the subordinate establishments were considerably increased, but the strength of the subordinate staff in most provinces was still far short of the sanctioned establishment, the demand for veterinary graduates being greater than the supply, and the European staff required small in proportion to the volume of work calling for attention. The post of Inspector-General, Civil Veterinary Department was abolished with effect from the 1st April 1912, the duties being transferred partly to local Governments and partly to the Agricultural Department of the Government of India. Of late years small veterinary departments, modelled on the Civil Veterinary Department, were started in several native states.



The Current enters the Indian seas quite at the commencement of June and in the course of the succeeding two weeks spreads over the Arabian Sea and Bay of Bengal up to their aqueous vapours

When this current is fully established a con- Ocean, the Indian seas and the Indian land area from Lat  $30^{\circ}$  S to Lat  $30^{\circ}$  N the southern half being the south-east trades and the north-ern half the south-west monsoon. The most important fact about it is that it is a continuous horizontal air movement passing over an extensive oceanic area where steady evaporation is constantly in progress so that where the current enters the Indian seas and flows over the Indian land it is highly charged with aqueous vapours

The hot weather period, discussed above, the winds and weather are mainly determined by local conditions between the Equator and Lat  $30^{\circ}$  or  $35^{\circ}$  south the wind circulation is that of the south-east trades, that is to say about Lat  $20^{\circ}$  North there is a north-east wind which blows southward till it reaches the thermal equator where side by side with the south-east trades mentioned above, the still further to the northward and in the immediate neighbourhood of land there are the circulations due to the land and sea breezes which are attributable to the difference in the heating effect of the sun's rays over land and sea. It is now necessary to trace the changes which occur and lead up to the establishment of the south-west monsoon period. The sun at this time is progressing slowly northward towards the northern Tropic. Hence the thermal equator is also progressing northward and with it the area of ascent of the south-east trades circulation. Thus the south-east trade and further northward, as the thermal equator crosses the equator and advances further towards the equator follows the sun in its northern progress. At the same time the temperature over India increases rapidly and barometric pressure diminishes, owing to the air rising and being transferred to neighbouring cooler regions—more especially the sea areas. We have the southern Trades circulation extending northward and the local land and sea circulation extending southward until about the beginning of June the light unsteady interfering circulation over the Arabian Sea finally breaks up, the immense circulation of the south-east Trades, with its cool, moisture laden winds rushing forward, becomes linked on to the local circulation proceeding between the Indian land area and the adjacent seas and India is invaded by oceanic conditions—the south-west monsoon proper. This is the most important season of the year as upon it depends the prosperity of at least five-sixths of the people of India

extreme northern limits India from these two seas. The Arabian sea current blows on to the west coast and sweeping over the Western Ghats prevails more or less exclusively over the Peninsula, Central India, Rajputana and north Bombay. The Bay of Bengal current blows directly up the Bay. One portion is directed towards Burma, East Bengal and Assam while another portion curves to south at the head of the Bay and over Bengal, and then meeting with the barrier of the Himalayas curves still further and flows as a south-easterly and easterly wind right up the Gangetic plain. The south-west monsoon continues for three and a half to four months, viz., from the beginning of June to the middle or end of September. During its prevalence more or less general though far from continuous rain prevails throughout India the principal features of the rainfall distribution being as follows. The greater portion of the Arabian Sea current, the total volume of which is probably three times as great as that of the Bengal current, blows directly on to the west coast districts. Here it meets an almost continuous hill range, is forced into ascent and gives heavy rain alike to the coast districts and to the hill range, the total averaging about 100 inches most of which falls in four months. The current after parting with most of its moisture advances across the Peninsula giving occasional uncertain rain to the Deccan and passes out into the Bay where it coalesces with the local current. The northern portion of the current blowing across the Gujarat, Kathiawar and Sind coasts gives a certain amount of rain to the coast districts and frequent showers to the Aravalli Hill range but very little to Western Rajputana, and passing onward gives moderate to heavy rain in the Eastern Punjab, Eastern Rajputana and the north-west Himalayas. In this region the current meets and mixes with the monsoon current from the Bay

The monsoon current over the southern half of the Bay of Bengal blows from south-west and is thus directed towards the Tenasserim hills and up the valley of the Irrawaddy to which it gives very heavy rain. That portion of this current which advances sufficiently far northward to blow over Bengal and Assam gives very heavy rain to the low-lying districts of East Bengal and immediately thereafter coming under the influence of the Assam Hills is forced upwards and gives excessive rain (perhaps the heaviest in the world) to the southern face of these hills. The result of the southward over Bengal, is then directed westward by the barrier of the Himalayas and gives general rain over the Gangetic plain and almost daily rain over the lower ranges of the Himalayas from Sikkim to Kashmir

On the south of this easterly wind of the Bay current and to the north of the westerly wind of the Arabian Sea current there exists a debatable area running roughly from Hissar in the Punjab through Agra, Allahabad and the current of the monsoon prevails. In this area the rainfall is uncertain and would probably





**MONSOON OF 1915.**

The Arabian Sea monsoon arrived on the west coast about the middle of June, a fortnight after the normal date, and although it gave an abundant rain to the greater part of the Peninsula, it failed to penetrate properly in several regions further north. The Bay current set in very gradually and at first provided less rain than usual with the result that over practically the whole tract, stretching from Bihar and Orissa to the valley of the Indus, the rainfall of June was more or less in defect of the normal amount. The monsoon was also deficient in Madras South-east and Konkan.

The excess was greatest in the United Provinces East (17½" or 47 per cent), Bombay Decan (6½" or 23 per cent) and Madras Coast North (7" or 27 per cent), while the defect was most pronounced in Orissa (11" or 22 per cent), Chota Nagpur (13" or 20 per cent), Punjab (7" or 46 per cent), Rajputana (8" or 45 per cent), Gujarat (11½" or 50 per cent) and Central India West (7½" or 26 per cent). Considering the smallness of the normal fall the shortage was serious also in Sind and the North-West Frontier Province.

In Burma the recorded quantity was very nearly normal.

For meteorological purposes India is divided into 33 sub-divisions and taking the whole season from 1st June to 15th October, in three of these the rainfall was in excess of the normal, in most parts of which favourable rain occurred, and the drought which at one time threatened to prove as serious as in 1877 was mitigated considerably.]

The most characteristic features of the monsoon of 1915 thus were—(a) Its late arrival (b) Its weakness and unsteadiness in July and August, particularly in the usual field of the Arabian sea current, (c) Its failure to penetrate into north-west India before the middle of September, (d) Its continuance up to about the middle of October in north-west India where as a rule the rains come to an end in the third week of September, and (e) Its unusual concentration in the Peninsula to the detriment of northern India

Rainfall, 1st June to 15th October 1915		Division	
Actual	Normal	Departure from normal	Percentage departure from normal.
75.1	81.0	- 5.9	( - 7
68.2	68.8	+ 5.0	+ 8
60.3	68.8	+ 1.5	+ 3
41.8	47.5	+ 5.7	+ 12
43.7	37.7	+ 6.0	+ 16
8.6	15.8	+ 7.2	+ 46
2.1	5.1	+ 3.0	+ 59
0.6	4.8	+ 4.2	+ 87
10.2	18.5	+ 8.3	+ 45
36.1	30.8	- 3.5	- 9
32.7	35.1	- 2.4	- 7
43.2	41.6	+ 1.6	+ 4
32.1	28.4	+ 3.7	+ 13
19.3	10.3	+ 9.0	+ 6
31.5	29.7	+ 1.8	- 5
Mean of India	38.8	- 1.9	- 5

# The Textile Industry.

India has been the home of the cotton trade from the earliest times. Its cotton, known as white wool, was well known to the ancients, and its cloth was familiar to the West in the days of the overland route. The name Calico comes from the two woven goods of Calicut, and the products of the Dacca handlooms are still remarkable as the finest muslins human skill can produce

## Indian Cotton

The exports of Indian cotton began to assume importance with the opening of the sea route. They received an immense stimulus during the American Civil War, when the close blockade of the Confederate ports produced a cotton famine in Lancashire, and threw the English spinners back on India for their supply of raw material. When the war broke out the shipments of Indian cotton were 528,000 bales, but during the last years of the war they averaged 973,000 bales. Most of this cotton was sold at an enormously inflated price, and induced a flow of wealth into Bombay, the great centre of the trade, for which there was no outlet. The consequence was an unprecedented outbreak of speculation known as the "Share Mania," and when the surrender of Lee reopened the Southern Ports widespread ruin followed. It is estimated that the surplus wealth brought into the country by the American Civil War aggregated £92 millions. Since then the cultivation of Indian cotton, although interrupted by famine, has steadily increased. For the last season for which returns are available, 1914-15, the total area in all the territories reported on was computed at 24,632,000 acres or 1.55 per cent on the 25,020,000 acres (revised figure) of the previous year. The total estimated outturn was 5,232,000 bales of 400 lbs as against 5,005,000 bales for previous year, representing an increase of nearly 3.29 per cent. To this figure may be added some 1,000 bales estimated as the production in Native States in Behar and Orissa which make no return.

Bombay, the Central Provinces and Hyderabad are the chief producing centres. The following table gives the rough distribution of the outturn. The figures are the estimated figures for the past season, and are not exact, but they indicate the distribution of the crop —

Bombay	4,800
Behar and Orissa	237,000
Assam	16,000
Hyderabad	12,000
Bengal	35,000
United Provinces	1,345,000
Ajmer-Merwara	13,000
Punjab	1,835,000
North-West Frontier	13,000
Sind	121,000
Bombay and Baroda	1,724,000
Central Provinces	1,097,000

The principal varieties are Dhollera, Broach, Comras (from the Betwa), Dhawar and Comragra. Broach is the best cotton grown in Western India. Hingnagar cotton, from the Central Provinces, has a good reputation. Bengals is the name given to the cotton of the Gangetic valley, and generally to the cottons of Northern India. The Madras cottons are known as Western, Coconada, Colaba, and Tinnerly. The bet of these is Tinnerly. Cambodia cotton has been grown with success in Southern India but it shows a tendency to revert. The prices of cotton realised of recent years have given a great impetus to cultivation. Government have also been active in importing the class of cotton produced, by word and deed, by privatisation and the importation of seed cottons. Although these measures have not with a considerable measure of success, they have not succeeded far enough to prevent the whole outturn, which still comes for the most

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part of a short-staple early maturing variety, suitable to soils where the rainy season is brief. Reference has been made to the popularity of the Indian handloom cloths in the earliest days of which we have record. This trade grew so large that it excited alarm in England, and it was killed by a series of enactments, commencing in 1701, prohibiting the use or sale of Indian calicoes in England. The invention of the spinning jenny and the power loom set back the handloom in England. The handloom set back from famine, plague and other causes, its progress was rapid.

The following statement shows the quantity (in pounds) of yarn of all counts spun in all India in the twelve months, April to March, in each of the past three years—

1914-15	1913-14	1912-13	GRAND TOTAL
448,556,403	479,682,975	485,566,927	Bombay Madras Bengal U P C P and Berar Punjab Native States
43,031,691	44,673,626	44,974,188	
31,708,798	33,219,947	37,855,113	
50,281,135	44,468,505	43,765,289	
6,813,549	6,274,754	5,339,339	
34,565,150	36,532,870	33,681,772	
36,946,491	37,924,174	37,890,324	
651,903,307	682,776,851	688,472,902	

The spinning of yarn is in a large degree centred in Bombay, the mills of that province producing nearly 75 per cent. of the quantity produced in British India. The United Provinces of Agra and Oudh and Madras produced about 7 per cent each, while Bengal and the Central Provinces produced 5 and 4 per cent. respectively. Elsewhere the production is as yet very limited.

Here is a detailed statement of the quantity (in pounds) and the counts, or numbers, of yarn spun in Bombay Island—

1914-15	1913-14	1912-13	TOTAL
89,219,069	89,351,981	95,429,461	Nos. 1 to 10 " 11—20 " 21—30 " 31—40 Above 40 Wastes, &c
162,557,972	186,216,655	188,102,383	
46,552,972	74,751,191	74,850,464	
4,016,805	3,880,678	4,420,751	
599,062	822,287	837,260	
105,902	51,911	40,701	
322,153,282	355,024,696	363,681,000	

The corresponding figures for Ahmedabad are as follows—

1914-15	1913-14	1912-13	TOTAL
2,239,295	1,508,504	2,039,676	Nos 1—10 " 11—20 " 21—30 " 31—40 Above 40 Wastes, &c
21,010,020	14,912,547	15,666,673	
39,011,371	39,543,101	37,049,666	
8,870,048	11,890,408	11,687,071	
252,205	968,218	1,375,446	
4,713	144,959	1,662	
72,437,652	68,952,737	67,810,194	

YARN SPUN THROUGHOUT INDIA  
The grand totals of the quantities in various counts of yarn spun in the whole of India, including Native States, are given in the following table —

	1912-13	1913-14	1914-15	TOTAL	
Nos 1-10	137,002,274	130,783,748	130,978,122	651,903,307	
" 11-20	869,393,232	361,903,914	343,283,826		
" 21-30	158,836,811	166,994,607	156,230,374		
" 31-40	19,641,700	19,712,208	18,701,101		
Above 40	2,937,880	2,608,686	2,232,668		
Wastes, &c	660,953	678,598	473,216		
	688,472,902	682,776,851			

In the early days of the textile industry the energies of the millowners were largely concentrated on the production of yarn, both for the China market, and for the handlooms of India. The increasing competition of Japan in the China market, the growth of an indigenous industry in China and the uncertainties introduced by the fluctuations in the China exchanges consequent on variations in the price of silver compelled the millowners to cultivate the Home market. The general tendency of recent years has been to spin higher counts of yarn, importing American cotton for this purpose to supplement the Indian supply, to erect more looms, and to produce more dyed and bleached goods. This practice has reached a higher development in Bombay than in other parts of India, and the Bombay Presidency produces nearly 87 per cent of the cloth woven in India. The United Provinces produces 3.8 per cent, the Central Provinces 5 per cent and Madras about 3 per cent. Grey (unbleached) goods still represent nearly 77 per cent of the whole production, but dyeing and bleaching are making rapid progress.

ANALYSIS OF WOVEN GOODS  
The following brief extract is taken from the statement of the quantity (in pounds and their equivalent in yards) and description of woven goods produced in all India, including Native States —

	1912-13	1913-14	1914-15	Grey and Bleached piece-goods— Pounds Yards Coloured piece goods— Pounds Yards Grey and coloured goods other than piece-goods— Pounds Yards Hosiery— Pounds Dozens Miscellaneous— Pounds Dozens Total— Pounds Yards Dozens	BOMBAY WOVEN GOODS
	211,111,391 914,181,236 71,828,052 306,251,309 1,812,894 416,133 500,997 284,799 217,663	202,763,449 872,443,720 68,839,264 291,845,868 2,166,496 637,640 471,349 267,411 157,992	213,576,441 880,501,618 61,067,187 255,266,334 1,733,037 512,485 255,918 179,373 341,262		255,491,002 1,220,442,545 699,032 1,164,281,568 274,383,550 905,051 1,135,707,952 277,005,800 691,658

The output of woven goods during the three years in the Bombay Presidency was as follows:—  
(The weight in pounds represents the weight of all woven goods, the measure in yards represents the equivalent of the weight of the grey and coloured goods)

	1912-13	1913-14	1914-15
Pounds	420,203,550	218,042,731	222,153,912
Yards	1,001,464,973	941,672,593	922,532,228
Dozens	135,078	701,005	769,120

## The Textile Industry

The grand totals for all India are as follow —

	1912-13	1913-14	1914-15.
Pounds	285,471,002	274,388,550	277,005,900
Yards	1,220,442,545	1,164,291,588	1,135,707,952
Dozens	690,932	905,051	691,858

## TRADE OF THE YEAR.

The depression in the cotton trade which was noticeable before the close of 1913 continued into 1914 and four weeks before the outbreak of war the full effects of a prolonged depression were discernible. Stocks began to accumulate for some time, although the majority continued to work. Both the spinning and weaving industries suffered throughout the year, and at the close there was no immediate prospect of a large off-take of the supply of chemicals and dyes, which were regularly obtained from Germany, presented a serious difficulty on the outbreak of war. The outturn of the mills shows that the production of yarn during 1914-15 was 652 million lbs, a decrease of 31 million lbs or 4.5 per cent, while that of cloth (277 million lbs) increased by 3 million lbs or about 1 per cent as compared with the production of 1913-14. A rough estimate of the value of Indian production in 1914-15 is Rs 30½ crores for yarn, and Rs 1½ crores for woven goods, the value of local manufactures is less than the imports from abroad by nearly Rs 4 crores.

**Indian Production**—The production of Indian weaving mills consists chiefly of grey and bleached piecegoods. There was a slight recovery in production during the year. The production of grey and bleached piecegoods increased by 8 million yards to 880 millions, but that of coloured goods decreased by about 36 million yards to 255 millions. In the whole of India 6,634,989 spindles, and 104,180 looms were at work during 1914-15 employing on the average 258,738 persons the share of Bombay being 4,648,370 spindles, 81,411 looms and 175,438 persons. India produced in 1914-15 652 million lbs of yarn, out of which 247 million lbs were consumed in the production of cloth 142 million lbs were exported by sea and land, leaving about 263 million lbs which was probably consumed in the handloom weaving. More yarn is consumed in the country than is exported.

**Export Trade**—The figures of the export trade are given below —

	Yarn	Goods	Total
	Rs	Rs	Rs
	Million	(lakhs)	(lakhs)
1910-11	183	8.62	2.39
1911-12	151	7.59	2.19
1912-13	204	9.92	2.28
1913-14	198	9.88	2.29
1914-15	134	6.28	1.73

The trade in cotton twist and yarn was bad last year and the demand from most of the consuming countries was poor. The export declined by 64 million lbs or 32.5 per cent.

The exports of piece goods also contracted by 22 million yards or 24.7 per cent in quantity and by Rs 55 lakhs or 25.7 per cent in value, indicating a decrease in the declared value by 2.2 per cent from 3 annas 10 pies per yard in 1913-14 to 3 annas 9 pies per yard in the year. Grey goods represented 49 per cent of the total, and in this line the trade declined by nearly 11 million yards, and Rs 19½ lakhs, while coloured goods consumed chiefly of lungies, and saris, representing 50.6 per cent of the total, showing a decline of 11 million yards and Rs 34½ lakhs. The principal customers are East Africa, the Straits, Aden, Ceylon, Persia, Asiatic Turkey, Siam and Egypt. The trade with China declined from 970,600 yards to 177,200 yards. The other eastern countries showed marked decreases, namely, the Straits by 3 million yards and Rs 12 lakhs, Ceylon by 2½ million yards and Rs 12 lakhs, Aden recovered from the previous year's depression, the increase amounting to 3 million yards, valued at Rs 4½ lakhs, while Asiatic Turkey and Egypt recorded a decrease of 8 million yards and 1½ million yards respectively. Persia also took 2 million yards less than in the previous year. Both German East Africa and the British East African Protectorate suffered and recorded a decrease of 3½ million yards, and 1½ million yards respectively. Handkerchiefs, which are made by the hand loom in the Madras Presidency and are the chiefly exported to the United Kingdom, improved slightly.



Statement of the amount in rupees of Excise duty realised from goods woven in the Cotton Mills in British India, under the Cotton Duties Act, 1880, also the amount of equivalent duty levied in the Native States, in each year from 1895-96 to 1912-13

Central Provinces and Berar (a)	Punjab	United Provinces of Agra and Oudh (also Ajmer-Merwara)	Bengal	Madras	Bombay
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1895-96 (b)	1896-97	1897-98	1898-99	1899-1900	1900-01	1901-02	1902-03	1903-04	1904-05	1905-06	1906-07	1907-08	1908-09	1909-10	1910-11	1911-12	1912-13	1913-14	1914-15 (c)
196	9,14,480	9,60,600	66,470	1,180	4,80	60	4,250	615	13,270	18,270	13,460	12,730	10,448	64,818	61,000	44,350	43,870	45,870	4,250
496	56,300	66,470	1,180	900	2,623	5,038	60,110	6,806	84,978	84,978	1,10,140	1,30,620	1,56,371	1,61,368	1,68,743	1,64,680	1,75,944	9,509	6,611
1,48	10,95,236	11,26,390	89,130	88,678	1,79,569	1,42,295	31,556	1,66,044	1,88,345	1,92,552	1,82,083	1,84,653	2,11,847	2,53,467	2,07,454	10,285	2,52,282	8,00,919	2,52,282
42,91,544	46,68,188	2,13,166	78,951	53,028	53,851	65,822	1,92,552	1,88,345	1,92,552	1,82,083	1,84,653	2,11,847	2,53,467	2,07,454	10,285	2,52,282	8,00,919	2,52,282	2,52,282
36,78,555	1,48,136	1,65,048	48,631	50,359	53,851	65,822	1,92,552	1,88,345	1,92,552	1,82,083	1,84,653	2,11,847	2,53,467	2,07,454	10,285	2,52,282	8,00,919	2,52,282	2,52,282
42,91,544	46,68,188	2,13,166	78,951	53,028	53,851	65,822	1,92,552	1,88,345	1,92,552	1,82,083	1,84,653	2,11,847	2,53,467	2,07,454	10,285	2,52,282	8,00,919	2,52,282	2,52,282

Total British India	Native States	Grand Total
Gross duty	Gross duty	Gross duty
Net duty	Net duty	Net duty

1895-96 (b)	1896-97	1897-98	1898-99	1899-1900	1900-01	1901-02	1902-03	1903-04	1904-05	1905-06	1906-07	1907-08	1908-09	1909-10	1910-11	1911-12	1912-13	1913-14	1914-15
5,635	11,22,440	11,66,329	13,75,119	13,89,812	12,16,367	17,69,908	18,66,213	20,77,449	23,81,225	27,00,784	28,00,957	33,89,717	36,43,778	40,06,193	42,26,575	48,79,498	56,17,969	54,39,013	49,34,162
5,635	10,91,690	11,38,950	13,53,120	13,09,514	11,62,947	17,16,836	18,25,469	20,36,104	23,33,636	26,71,061	28,64,202	33,55,946	34,98,480	39,61,020	1,75,878	48,04,492	55,76,567	53,95,014	48,79,385
244	18,459	47,835	52,186	40,937	48,449	61,171	65,541	69,061	67,320	83,455	81,976	97,499	1,14,498	1,37,699	1,75,878	1,82,479	2,21,178	2,38,593	2,33,160
5,879	11,41,899	12,14,164	14,27,305	13,80,749	12,64,756	18,91,079	19,31,754	21,86,510	24,49,145	27,90,239	29,82,671	34,97,216	36,58,276	41,43,892	44,56,129	49,61,957	58,39,147	56,77,436	51,67,322
5,879	11,10,049	11,86,785	14,05,306	13,50,451	12,11,596	17,77,965	18,91,010	20,95,149	24,06,976	27,64,516	29,46,152	34,53,443	36,12,977	40,93,719	44,01,707	49,86,071	57,97,745	56,83,407	51,12,545

(\*) From the 1st October 1902 from which date the province was leased in perpetuity to the British Government  
(b) For February and March 1896  
(c) Provisional



COTTON FIRES IN BOMBAY.

(vii) The institution of a tribunal or court of enquiry of the nature referred to in the preceding paragraph.

**Fraudulent Incendiarism**—Government acquired the committee's conclusion that the fires of 1914 were due to wilful and fraudulent incendiarism, the motive for which is to be found in the exceptional conditions which characterized the cotton market during that season. In the absence of a definite clue, the Committee found itself unable to determine upon which of the several classes which stood to benefit by the destruction of large stocks of cotton the culpability for these conflagrations lay.

The Resolution also stated that, pending the completion of the Secret Recommendation, the Port Trust are making arrangements, at a cost of approximately three lakhs, to lay out a suitable storage ground near the reclaimation. This, in conjunction with the existing Cotton Green, will add of even a large crop being stored in conditions which will not reproduce the dangerous features which characterized the storing of last year's crop. The Insurance companies have already taken action, by the imposition of almost prohibitive rates where these precautions are not observed, to compel the restriction of the height of stacks of bales and the provision of a liberal allowance of free space between adjoining stacks. The provision of the additional storage area referred to above will facilitate the adoption of these very necessary safeguards.

The annual report on the Bombay City Police for 1914 states that "a thorough examination of the books of various companies has established beyond a shadow of doubt that considerable fortunes have been made over the fires by those in the cotton trade, as a result of a system of fraud in the dealing, mixing, and classification of cotton." Later investigation, however, is believed to have resulted in a considerable modification of that statement and of the theory of concerted incendiary crime.

**Artificial Damping**—The attention of the International Cotton Committee, under the presidency of Sir Charles Macarty, was in 1914 drawn to the subject of India on the Committee's two representatives of India on the Committee suggested the possibility that the artificial damping of the cotton might be a contributory cause to the outbreaks. The point was made that the International Federation have waged the cotton war against the artificial damping of cotton and have heard from Lord Crewe, the Secretary of State for India, that the practice was one which was fraudulent and should be met by penal legislation. A strong opinion was expressed in favour of the Government of India passing an Act in accordance with the terms of Lord Crewe's speech. Mr. Berger, the representative of France stated that since the perfecting of the system of testing cotton for damp on its arrival at the port of Havre the number of fires has been reduced to a negligible amount.

(vi) Efforts by Insurance Companies to safeguard as closely as possible their own interests after a fire has occurred.

(v) The provision of an adequate number of hydrants and full pressure of water throughout the 24 hours.

(iv) The organization and maintenance by the cotton merchants and Insurance Companies jointly of a better staff for guarding the Green.

(iii) The restriction of the height of cotton stacks, with proper alleys, lanes or roads between the various stacks and jetties.

(ii) The storage of cotton in godowns which are properly built.

(i) The removal of the Cotton Green from Colaba to some more spacious, better arranged, better drained and more remote site.

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# The Jute Industry

Considering its present dimensions, the jute industry of Bengal is of very recent origin. The first jute mill in Bengal was started at Rishra in 1855, and the first power-loom was introduced in 1859. The original output was 8 tons per day. In 1869 it had grown to 2,500 tons per day, it is now 3,000 tons per day (working short time), and it shows every indication of growing and expanding year by year. Another interesting thing about the jute industry of Bengal is that, although it is practically a monopoly of Scotsmen from Dundee, the industry itself owes its inception to an Englishman. The founder of the industry was George Acland, an Englishman, who began life as a midshipman in the navy, and was some years in the East India Marine Service. He quitted this service while still a young man, and engaged in commercial pursuits in Ceylon, where he was successful. Later on he turned his attention to Bengal, and arriving in Calcutta about 1853 he got into touch with the management of the paper works, then at Serampore, where experiments were being tried with country grasses and Abies plants to improve the quality or cheapen the manufacture of paper. This seems to have suggested to Acland the manufacture of them, and in 1854 he proceeded to England, with a view to obtaining machinery and capital in order to manufacture goods from that material. During this trip he visited Dundee, and while there Mr John Kerr, of Douglas Foundry, suggested to him the importing of machinery into Bengal, "where the jute comes from and for shortly afterwards Acland placed orders with Kerr for a few systems of peeping and spinning machinery, and returned to India the same year accompanied by his two sons and a few Dundee mechanics who were to assist him in erecting and operating the first jute mill in Bengal. This, as has been stated, was at Rishra, the site of the present Tellington mill, near Serampore, and here, in 1855, the first machine spun jute yarns were made. As not infrequently happens the pioneer got very little out of his venture. After several ups and downs the Acland interest in the Rishra mill ceased in 1867, and the company which Acland had formed in 1854 was wound up in 1868.

**Power-loom.**—The pioneer's example was followed by Mr George Henderson of that ilk and firm, and in 1859 the Borneo Jute Co. was launched under his auspices. To this company is due the credit of introducing the power-loom for jute cloth. Unhappily the financial difficulties which had burdened the Aclands, the Borneo Jute Co. made rapid progress, doubling their works in 1864, and clearing their capital twice over. In 1872 the mills were turned into a limited liability company, the present "Barnagore Jute Manufacturing Co., Ltd." Four other mills followed in succession—Gouripore, Serajung, and India Jute Mills.

"From 1863 to 1873," writes Mr. David Wallace in "The Romance of Jute," "the five mills excepting the Rishra mill simply after which came the following series of new witnessed large excursions to the existing mills, A full of four years National, Delta (which absorbed the Serajung), Arathoon, Anglo-India, Standard, Indian, Kharad, Gondopari (French owned), with 1,800 spindles (now acquired by Anglo) were started—the Gordon Twist Mill between 1866 and 1867 the following new into the Wellington branch of the Champdany Twist Mill, with 2,460 spindles, since merged this came into existence except the Calcutta 6,700. From this period on to 1894 no new bringing the number of looms at work up to Tirahur, Victoria and Rankamath mills, total was further augmented by the Hooghly up to 5,150 in 1882. By the end of 1883 the of the other mills, brought the total looms muli, together with additions made by some Jardine, Skinner & Co. to his own firm. This the agency of the Gouripore Co. from Messrs visit to Calcutta in 1876, when he transferred into being in 1877, as the result of Mr Barry's by Messrs Jardine, Skinner & Co., which came was put up. This was Kamrabbati, promoted Between 1876 and 1882 only one new mill badly and management Fort Gloster also suffered bund, to appear again later on under new names—turning Co. and the Rustomjee—became most Asiatic, the Bengal Pressing and Manufacturing. The older ones all survived the ordeal, but four of the new concerns—the Oriental, and ten years all the mills had a severe straining for the new industry, and for the next 1,250 up to 3,500. This was too much of a strain for the new industry, and for the next in all thirteen new companies, coming on all Messrs Birmyre Bros, of Greenock fame—tered in England, and Hastings, owned by Rustomjee (now the Central), Ganges (regis the Bellaghat-Burnagore branch mill), Bengal Pressing and Manufacturing Co (now (now Union), Asiatic (now Soorah), Clive, operations in 1874. In 1874-5 eight other day and Samungger, all of which commenced Shipore, and two Home companies, the Champ locally—the Fort Gloster, Budge Budge and In 1872-73 three new companies were floated the shares snapped up in the course of an afternoon.

In 1872-73 three new companies were floated locally—the Fort Gloster, Budge Budge and Shipore, and two Home companies, the Champ day and Samungger, all of which commenced operations in 1874. In 1874-5 eight other mills were launched—the Howrah, Oriental (now Union), Asiatic (now Soorah), Clive, the Bellaghat-Burnagore branch mill), Rustomjee (now the Central), Ganges (registered in England, and Hastings, owned by Messrs Birmyre Bros, of Greenock fame—in all thirteen new companies, coming on all a strain for the new industry, and for the next ten years all the mills had a severe straining for the new industry, and for the next four of the new concerns—the Oriental, and the older ones all survived the ordeal, but a full of four years National, Delta (which absorbed the Serajung), Arathoon, Anglo-India, Standard, Indian, Kharad, Gondopari (French owned), with 1,800 spindles (now acquired by Anglo) were started—the Gordon Twist Mill between 1866 and 1867 the following new into the Wellington branch of the Champdany Twist Mill, with 2,460 spindles, since merged this came into existence except the Calcutta 6,700. From this period on to 1894 no new bringing the number of looms at work up to Tirahur, Victoria and Rankamath mills, total was further augmented by the Hooghly up to 5,150 in 1882. By the end of 1883 the of the other mills, brought the total looms muli, together with additions made by some Jardine, Skinner & Co. to his own firm. This the agency of the Gouripore Co. from Messrs visit to Calcutta in 1876, when he transferred into being in 1877, as the result of Mr Barry's by Messrs Jardine, Skinner & Co., which came was put up. This was Kamrabbati, promoted Between 1876 and 1882 only one new mill badly and management Fort Gloster also suffered bund, to appear again later on under new names—turning Co. and the Rustomjee—became most Asiatic, the Bengal Pressing and Manufacturing. The older ones all survived the ordeal, but four of the new concerns—the Oriental, and ten years all the mills had a severe straining for the new industry, and for the next 1,250 up to 3,500. This was too much of a strain for the new industry, and for the next in all thirteen new companies, coming on all Messrs Birmyre Bros, of Greenock fame—tered in England, and Hastings, owned by Rustomjee (now the Central), Ganges (regis the Bellaghat-Burnagore branch mill), Bengal Pressing and Manufacturing Co (now (now Union), Asiatic (now Soorah), Clive, operations in 1874. In 1874-5 eight other day and Samungger, all of which commenced Shipore, and two Home companies, the Champ locally—the Fort Gloster, Budge Budge and In 1872-73 three new companies were floated the shares snapped up in the course of an afternoon.

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# The Jute Industry

mills, besides further heavy extensions—Dallage, Belvedere, Auchland, Kelvin and North-house, Alexandria, Naitahal, Lawrence, Re-ages from the earliest year for which complete information is available with accuracy for the last five years, and the figures in brackets represent of the quinquennial from 1879-83 to 1883-84 as 100. It will be seen that the number of looms and spindles in operation has increased to a very much larger extent than either the number of mills at work or the amount of nominal capital employed. The following statement shows quinquennial averages.

## Progress of the Industry.

Number of mills at work		Nominal Capital (in lakhs of Rs.)		Persons employed		Looms		Spindles	
1879-80 to 1883-84		1884-85 to 1888-89		1889-90 to 1893-94		1894-95 to 1898-99		1899-1900 to 1903-04	
21	(100)	270	7 (100)	38	8 (100)	52	7 (126)	402	6 (149)
24	(114)	341	6 (126)	56	7 (166)	64	7 (151)	572	1 (193)
36	(171)	650	(251)	114	2 (294)	165	(125)	201	1 (526)
46	(219)	900	(353)	216	4 (526)	201	6 (519)	201	6 (519)
58	(276)	1,151	(425)	216	4 (526)	201	6 (519)	201	6 (519)
61	(290)	1,196	5 (442)	201	6 (519)	201	6 (519)	201	6 (519)
64	(303)	1,209	(446)	216	4 (526)	201	6 (519)	201	6 (519)

The production of the mills has increased to a still greater extent. The following statement shows the export of jute manufactures and the declared values for the quinquennial periods.

Quintennial production in millions of pounds		Quintennial value in lakhs of Rs.	
1879-80 to 1883-84		1884-85 to 1888-89	
1384	83 (1883-84)	1594	95 to 1898-99
1389	90 to 1893-94	1599	1000 to 1903-04
1394	05 to 1903-04	1604	05 to 1908-09
1909	10	1609	10
1910	11	1610	11
1911	12	1611	12
1912	13	1612	13
1913	14	1613	14

Up to the last quinquennium the exports of raw jute were marked by increases from year to year though the improvement was not so rapid as in the case of manufactures. A slight decrease in the exports occurred in 1909-10 as compared with the figures for the preceding quinquennial period and a further decline in 1910-11, but a marked recovery was made in 1911-12 which was accentuated in 1912-13 —

Jute, raw, in millions of cwt

1879-80 to 1883-84 7 5 (100)

1884-85 to 1888-89 8 9 (119)

1889-90 to 1893-94 10 (133)

1894-95 to 1898-99 12 3 (164)

1899-1900 to 1903-04 12 7 (169)

1904-05 to 1908-09 15 09 (201)

1909-10 14 6 (195)

1910-11 12 7 (169)

1911-12 16 2 (216)

1912-13 17 5 (233)

1913-14 15 4 (205)

1879-80 to 1883-84 1879-80 to 1883-84

1884-85 to 1888-89 1884-85 to 1888-89

1889-90 to 1893-94 1889-90 to 1893-94

1894-95 to 1898-99 1894-95 to 1898-99

1899-1900 to 1903-04 1899-1900 to 1903-04

1904-05 to 1908-09 1904-05 to 1908-09

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2156 2156

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2161 2161

2162 2162

216

## Estimated acreage under Jute

Name of province

1914

1915

Decrease

Bengal—	Western	Northern	Eastern	Cooch Behar	Bihar and Orissa	Azam	Total
169,830	297,309	555,511	1,549,894	44,413	333,120	102,300	3,349,437
264,126	591,365	1,150,403	27,356	215,339	83,100	19,200	2,365,151
934,286							

The Jute Mills Association now one of the most important, if not the most important, of the bodies attached to the Bengal Chamber of Commerce, was started under the following circumstances—In 1886 the existing mills, finding that in spite of the constant opening up of new markets, working results were not favourable, came to an agreement, with the late S. E. J. Clarke, Secretary to the Chamber of Commerce, as trustee, to work short time. The only mills which stood out of this arrangement were the Hooghly and Serajunge. The first agreement, for six months dating from 15th February 1886, was subsequently renewed at intervals without a break for five years up to February 15, 1891. The state of the market at the time of the renewals dictated the extent of the short time, which varied throughout the five years between 4 days a week, 8 days a fortnight and 5 days a week. Besides short time, 10 per cent. of the sacking looms were shut down for a short period in 1890. An important feature of this agreement was a mutual undertaking by the parties not to increase their spinning power during the currency of the agreement, only a few exceptions being made in the case of a few incomplete new mills.

Working days—With the introduction of the electric light into the mills in 1896, the working day was increased to 15 hours, Saturday included, which involved an additional amount of cleaning and repairing work on Sundays. In order to minimise this Sunday work and give them a free Sunday, an agreement was got up in 1897 by the Mill European assistants to have the engines stopped at 2 or 3 p.m. on Saturdays. The local Government took the matter up, but their action went no further than applying moral suasion, backed by a somewhat half-hearted threat. The Mill Association held meetings to consider the question and the members were practically agreed as to the utility of early closing on Saturdays, but, *more so*, could not trust themselves to carry it out without legislation. Unfortunately the Government of India refused to sanction the passing of a Resolution by the provincial Government under the Factory Act and the matter was dropped. Only a year later the Jute Mills Association in des-

pat brought out an American business expert, Mr. J. H. Parks, to advise them on the possibility of forming a jute trust with a view to exercising some control over the production and price of jute. Mr. Parks came, and wrote a report which the Association promptly pigeon-holed because the slump was over and the demand was so prodigious that there was no need to worry about the price of jute.

An Association, styled the European Jute Dealers Association, has lately been formed in Calcutta to promote and to guard the common interests of its members as dealers in jute bales and brokers of jute for sale to the jute mills in and around Calcutta. The first annual general meeting was held on the 1st October, when a Committee consisting of the following gentlemen was elected for the year 1915-16, namely—Messrs R. L. B. Gall, C. D. Stewart, P. E. Suttle, G. S. Alexander, G. Morgan, and A. Tosh. The Committee have since elected Mr. George Morgan to be the Chairman of the Association for the year.

Effect of the War—The official review of the trade of India in 1914-15 says—It will be remembered that among the circumstances which added materially to the rapid development of the world's jute industry were the Criméan war in 1854-56 and the Civil war in America in 1861-63. It was anticipated on the outbreak of war that history would repeat itself, and that there would be a large demand for manufactured jute, especially for military and transport purposes. This anticipation was fulfilled and by the end of the year under review Calcutta jute mills were never in a more prosperous state. The short time agreement among the Bengal mills to work five days a week from April 1914 came to a conclusion at the end of September. From the 3rd October the mills commenced a six day week, some of them on the full double shift of 13½ hours and others on 11 hours single shift. The result of the exceptionally high level at which jute and jute goods had until then been ruling, had not only been to curtail the consumption of jute goods, but also to bring substitution for jute such as textile and textile, with-

the region of possibility. When, however, the price of the raw material reached its lowest level, most of the mills took advantage of the situation, and secured large stocks of cheap jute. The demand for manufactured goods was not active, and as a consequence the mills were unable to sell goods against their purchases. But later on the mills sold again their purchases at a large profit, especially after October, owing to the fact that during the latter half of the year a large amount of jute goods were manufactured to an extent which had never been previously known in India, and it is likely that as long as the war continues the mills here will be kept fully employed.

The extent of the jute industry and its importance to India may be gathered from the figures of the export of the manufactured articles —

Bags	No millions	Value of jute goods Rs. (lacs)
Cloth	1,061	28,27
Yards "	369	83
Hope	1,037	64

Value of jute goods Rs. (lacs) 28,27

1913-14 1914-15

During the year the exports amounted to nearly Rs 26 crores or £17½ millions, representing about 66 per cent of the total value of exports of the articles wholly or mainly manufactured and about 15 per cent of the total exports of Indian merchandise. In the pre-war period the exports amounted to nearly Rs 9 crores (56 millions) or 35 per cent of the year's trade in jute manufactures, against Rs 8½ crores (£5½ millions) in the corresponding period of 1913-14. In the war period the value fell from Rs 20 crores (£13½ millions) to Rs 17 crores (£11½ millions), the decline being due not to a smaller volume in trade but to a great decrease in the price of finished goods in sympathy with lower prices of the raw material. The exports of gunny bags and gunny cloth amounted to 388 millions and 1,037 million yards respectively, against 369 millions and 1,061 million yards in 1913-14, the figures for the war period being respectively 267 millions and 715 million yards against 243 millions and 742 million yards in the corresponding period of 1913-14.

## GLASS AND GLASSWARE

ture of bangle glass, and in this line it is interesting to record that the bangle glass of Ambala and Ferozabad has succeeded in capturing the market, whereas formerly large quantities of glass used to be imported from Belgium for this purpose. At the present time one or two glass factories only are working in India, and a new factory, the Western India Glass Works, Limited, of Bombay, is about to start work.

Records of the earlier ventures have shown that the failures in some cases were due, in part at least, to preventable causes prominent among which were (1) the lack of sufficient capital and the consequent inability of the companies to meet their heavy initial expenses, and (2) inexperience and lack of technical knowledge on the part of the promoters. But there are also certain real and special difficulties with glass manufacturers in India have to contend against. The principal difficulties are—(1) The temperature of India in the hot weather (2) The difficulty of obtaining skilled labour for glass blowing. Both foreign and men from local industries such as Nagina have been tried but neither have been entirely satisfactory. (3) There are considerable technical difficulties, such as the supply of a suitable quality of sand and a suitable alkali. With regard to the alkali, local sources, such as the salt of Northern India, have not yet given results adequate for the manufacture of high class glassware. At present imported bicarbonate of soda is mainly used. As this is imported from England there is no reason to anticipate any shortage of the supply. It is also probable that soda compounds will in time be locally manufactured in India.

The total value of glass and glassware imported into India in 1914-15 fell by Rs 117 lakhs to Rs 142 lakhs, about 58 per cent of which trade was effected in the pre-war period. Hither to Austria-Hungary has stood first among the exporting countries, and Germany has been second. During the year the value of Japanese imports of glass into India has increased by Rs 37 lakhs to Rs 19½ lakhs.

Glass manufacture in India consists of two well defined classes, the indigenous household industry and the modern factory industry. The indigenous household industry, which is represented in all parts of the country, is chiefly concerned with the manufacture of cheap bangles. Glass manufacture in India on the modern factory system has hitherto been an uphill struggle against great difficulties. In Bengal, the Pioneer Glass Manufacturing Company, Limited, of Litigah, started work in 1890, and the Bengal Glass Company of Sodepur in 1898. They ceased working in 1899 and 1902, respectively. The Madras Glass Works founded in 1909 has ceased work, though it is hoped to restart it. A factory started in Hyderabad also proved a failure and its plant was taken over by the Glass Works at Ambala. The Himalayan Glass Works at Rampur in the Dehra Dun district closed after three or four years' working in 1908, but was restarted later under new management. Finally, the Upper India Glass Works at Ambala, which was started by Indian capitalists in 1895, was at first a failure. Since 1903, however, it has been much more successful. It established itself firmly in its earlier years by specialising in the manufacture

# The Handloom Weavers.

By F Booth Tucker

Next to agriculturists the handloom weaver of India ranks second in numerical importance among her skilled industrial workers. In round figures about 11 million souls are dependent on this industry. From a position of prosperity and even affluence they have suddenly been reduced, through no fault of their own, but by circumstances over which they have no control and which it was impossible for them to foresee, to a condition of indigence and even starvation. Taking a superficial view of the situation one might be tempted to say that the remedy is in their own hands. Let them forsake their homes and take service in the mills and the problem will be solved. But this would be a short sighted and unwise policy. There are fundamental objections to it which cannot be overlooked.

What the handloom industry of India calls for is not annihilation, but leadership. To be a noble and ancient industry which has been for many ages one of the main bulwarks of India's prosperity voluntarily to commit herself to a height of self-sacrifice or which even Japanese models would hardly approve. The mill owners of Lancashire would no doubt benefit greatly—at least for the time being—if they could persuade the foolish mill owners of India that in view of Lancashire's superior skill, intelligence, education, capital or other causes, the latter ought promptly to commit suicide, and if they could persuade up the industry in its unequal struggle they were embarking in a wasteful and useless expenditure of money and energy, and that their proper course would be to tax it out of existence or at least abandon it to its fate!

## Training Schools

Unfortunately in the case of the voiceless handloom weavers the mill interests have to a large extent overruled Government that it is useless to help them to sustain the unequal struggle. Nearly every handloom weaving school in India and elsewhere has sooner or later been converted into a training school for mill foremen and managers, as-planned to salaries of from Rs 50 to Rs 500. What wonder when it is remembered that the managers of these institutions have been almost without exception themselves trained in mill schools to mill methods, and have become accustomed to look down upon the handloom industry, and to regard it as beguiling and doomed to extinction.

Similarly, when Government have appointed experts, or committees, to investigate the question and to report on the advisability and best means of helping the handloom weaver, to whom has the duty been entrusted? Almost invariably to mill experts, whose verdict has been a foregone conclusion. They might well have saved themselves the trouble and expense I have sometimes written for such persons myself and urged them to confer with our own experts, who have been engaged in the exclusive study of the problem for the last 7 or 8 years, or to allow me an opportunity

of presenting personally the handloom weavers' side of the story, and almost without exception they have been too busy, or have not been able to visit the centres suggested, or have paid them a cursory and contemptuous call while a more or less one-sided report has been presented, which has frequently resulted in Government withholding its much-needec help from this struggling community and further generously subsidising the wealthy mill-schools!

Not that the two interests are necessarily opposed to each other, any more than are the Infantry and Cavalry of an army in the field. While Indian mills are looking abroad for markets for their yarn, the 11 million skilled weavers at their door are well worthy of their inalienable market for their output. Mills that will study the requirements of this home field need not look outside the four corners of India for many a year to come.

## What is wanted

What the handloom weavers of India need is —

- 1 Leadership. The few leaders that have hitherto been supplied them have too often been wolves in sheep's clothing, who have failed either to understand their needs, or win their confidence.
- 2 The second great need is instruction in improved methods.
- 3 The weaver must also be placed in touch with the markets of the world.
- 4 This will involve a generous expenditure of money by Government in doing for the weaver what he obviously cannot do for himself. But the outcome will abundantly repay the outlay.

Properly led, properly instructed and properly connected with the world's great cloth bazaar, the weaver of India may yet again become India's pride, and the merchants of the world may yet again vie with one another in seeking the products of his age-old and skillful hands.

The task is not nearly so difficult as it seems. The machinery exists, but needs extension and expansion. There are some things which the weaver can, must and will do for himself. There are other things which must be done for him.

## Leadership

He must be supplied with Leaders who know his needs and in whom he can safely trust. These leaders ought not to be chosen from exceptional circumstances, to be chosen from his rivals. The mill-trained expert is, as a rule, of very little use to him and is often a positive source of danger. The leaders whom he needs must be in thorough sympathy with his cause, must understand his conditions, must include those who are able themselves to handle the shuttle and must not be mere students and theoreticians. And here I would like to say that it is highly dangerous for a

Presidency, or State to allow its policy to wards the handloom weaver to be dictated by a young graduate from a mill school. We should not dream of putting the cleverest University Graduate to fill the chair of a Commissioner or to dictate the policy of Government, because he had gained honours in Political Economy, Science, Languages or other elements of knowledge. And yet in not a few instances the destinies of the vast weaving community have been entrusted to the guidance of the mercenary tyros in this difficult art! What wonder that the ship has soon been wrecked and consequently abandoned, and then the cause regarded as hopeless.

The great majority of these leaders will have to be selected from the weavers themselves and not from callow unbled students of the theory of their art.

### Suitable Schools Needed.

2 Therefore they must have suitable schools. I say suitable because many of the schools established for their benefit have been anything but suitable. Frequently it has been necessary to close them for this very reason. The founder of one such brought the Governor of his Presidency to warn the weavers that if they failed to drink at the fountain of textile knowledge which Government had at great expense established for them, it would be his painful duty to stop its unvalued flow. One man could lead them to water, but even a Government could not force the unwilling horse to drink. Soon afterwards the institution was closed, and the weavers of course were blamed for their stupidity.

By a suitable school I mean,

(1) A school that is under the sympathetic management of a leader who understands the weavers' needs and can win their confidence.

(2) A school in which the teachers can themselves weave and can consequently be looked to by the weavers.

(3) A school exclusively for weavers and not for mill-students, nor a combination of the two. A school in which the adult weaver is taken by the hand and taught improved methods. His advice, assistance, suggestions and objections should be encouraged, and he should be given the free opportunity to choose for himself the kind of implements, materials and methods which he himself may prefer, within of course, reasonable limits. He may not be able to read, or write, but when it comes to questions of his own particular art, he will usually exhibit a shrewdness, alertness and common-sense, which should be developed and encouraged.

(4) Being a family man, the adult weaver must receive such remuneration as he may require for the support of his family, while learning improved methods.

(5) The school must be in close touch with the world's markets and must teach the weaver the kinds of cloth that it will pay him to make. The weaver is keenly awake to the commercial side of his undertaking, and will appreciate such assistance. The mere theoretical pedagogy is bad enough in an ordinary educational regime.

system, stultifying too often our children's heads with useless knowledge, but in a weaving school he spells blue ruin to its best interests.

(6) The weaver ought to be helped by means of loans and time payments to become the owner of the improved implements of which he has been taught the use, should he so desire. He should be allowed to select those which he himself prefers and should be enabled to pay for them by instalments.

(7) Travelling branches should be established which can go from village to village at regular intervals, explaining methods, inviting criticisms, establishing centres and helping to market the produce of the weavers and to obtain for them good yarn at reasonable prices.

### Marketing of Produce

3 The marketing of produce is not so difficult as might at first sight appear. Each centre should gradually work up a market of its own and when one line ceases to yield a reasonable profit, another should be substituted, as the weavers become better organized and trained, the market will gradually run after them.

We have ourselves established in connection with our various weaving schools a trading agency which takes over the whole of their output and whose business it is to find out what the markets require. It works on a strictly business basis and greatly facilitates the working of our schools.

It is now some eight years since the Salvation Army took up the cause of the handloom weavers of India and I think that we may claim to have gained a thorough working knowledge of their needs, and to have largely won their confidence.

One of our Officers has invented a loom which has been generally accepted as the best and latestest handloom in existence. What is even more important, it works so easily that a child can use it. Thus all the members of a weaver's family can work it in turn and bring their output almost to a level with that of a mill. Fast days for throwing the shuttle can be obtained from Rs 7, and upwards, and the complete loom from Rs 35 and upwards.

A fast loom is of no use to a weaver without a warping machine that can turn out long warps. For this we have a very simple device suitable for village use. One warping machine can keep some twenty fast looms supplied with warps. The cost of this machine is only Rs 35. The preparation of thread from cotton, wool, or silk has also received our attention, and improved methods have been introduced, which are greatly appreciated by the weavers and villagers. Improved spinning and reeling machines can be obtained for Rs 15 and upwards.

The price of the implements has been brought down to the lowest point consistent with good workmanship and materials. The strain upon a fast loom is very severe, and unless it is well made it soon goes to pieces. The weavers themselves well understand this and prefer a good machine, even if it costs more.



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**SAVITATION ARMY WORK**

We have already 27 centres of our own in India, where weaving, warping and silk reeling are being taught, while we have helped to start many others of a similar character. The manufacture of our work has spread to other lands, and we have supplied looms or weaving masters to Ceylon, the Straits Settlements, Burma, China and Rhodesia. I would close with a quotation to the testimony of a Burmese merchant who came over to our Indiania Weaving School to study the suitability of our methods for this country.

I arrived here on the 31st March 1913 to study the workings of the School and looms used on the 2nd of April, i.e. in two days' time I found to my surprise that I could weave at (Sd) MAWA HLA HLA, Mandalay, Burma. A disbeliever, love, respect and honour them" his staff to their duties cheerfully made me life of sacrifice from choice. The way he and to and the S A Officers here undergoing is generous and attentive I am surprised his subordinates are overworked. The Manager ing energetic and industrious I fear he and -school management and discipline are thorough and up to date. The Manager is hard work- ing leaving with regret on Saturday. The school management and discipline are thorough- ing machine and accessories, amounting in all about Rs 1,100 which were done and promptly dispatched to my entire satisfaction. I at once placed an order for 5 looms, one warp- ing machine and accessories, amounting in all these looms thoroughly in a fortnight I more care and attention, one could weave on more rate of fifty picks per minute. A little

STIR.

In the early days of the East India Company the Indian silk trade prospered greatly, and various sub-tropical races of the silkworm were introduced. But the trade gradually declined for the following reasons —

In the recent years and eighteenth centuries India's chief competitor in the silk trade was the Levant Company. Successful efforts, however, were made to acclimatise in Europe one of two races of a temperate worm, procured from China and Japan. When sericulture became part of the agriculture of France and Italy, a quality of silk was produced entirely different from that of India and Turkey, and organized new markets.

At subsequent experience seems to have established the belief that the plains of India, or at all events of Bengal, are never likely to produce silk that could compete with this new industry. On the lower hills of Northern India, on the other hand, a fair amount of success has been attained with this (to India) new worm, as, for example in Dehra Dun and Kashmir. In Banpur, it would appear probable that *Bombyx mori*, possibly obtained from China, has been reared for centuries. The capture of tashan has, from time to time, powerfully modified the Indian silk trade. The special properties of the *torus* silk were formerly much appreciated but the demand for them has now declined. This circumstance, together with defective systems of rearing and of hand-reeling and weaving, accounts largely for the present depression in the mulberry silk trade.

Watt states that in no other country does the necessity exist so pressing as in India to treat the subject of silk and the silk industries under two sections, viz., Bombycidae, the domesticated mulberry-feeding silk worms, and Saturniidae, or non-mulberry-feeding worms. In India the mulberry worm (*Bombyx Mori*) has been systematically reared for many centuries, there being six chief forms of it in the temperate tracts of India various forms of *Mori*.

India has three well-known purely indigenous silkworms, the *tana*, the *muga* and the *eri*. The first is widely distributed on the lower hills, more especially those of the great central table-land, and rears on several jungle trees. The second is confined to Assam and Eastern Bengal, and feeds on a laurel. The third exists in a state of semi-domestication, being reared on the castor oil plant. From an art point of view the *muga* silk is the most interesting and attractive, and the cocoon can be reeled readily. The *eri* silk, on the other hand, is so extremely difficult to reel that it is nearly always carded and spun—an art which was practised in the Khasi hills of Assam long before it was thought of in Europe.

Experiments have been made with numerous crosses and results have been very satisfactory. The improvement in the silkworms has been due to the selection of the best individuals in each generation and to the use of the most improved individuals as parents. The improvement in the silkworms has been due to the selection of the best individuals in each generation and to the use of the most improved individuals as parents. The improvement in the silkworms has been due to the selection of the best individuals in each generation and to the use of the most improved individuals as parents.

In Kashmir and Mysore satisfactory results have been obtained. In the former State sericulture has been fostered on approved European principles with Italian reeling machi-

provice to be supplied under Government supervision. It is believed that this is the only really effective method of dealing with the problem. A number of the existing smaller nurseries were closed during 1913 and others are being converted into enlarged and improved central nurseries with rearing houses complete. The ultimate success of the scheme depends largely on the willingness of the rearers to pay an adequate price for pure seed.

A pamphlet was published in 1915, by Mr. M. De, Srivastava Assistant at Pusa, which contains practical hints on improved methods and sub-divided several silk schools. The draft prospectus has been issued of a silk farm and institute to be started at Simla under the Governor of the Salvation Army. The Lieutenant Governor of the Punjab has permitted the school to be called after his name, and the Punjab Government is making a grant of Rs. 2,000 this year towards the expenses of Doraji Tata has also made a donation of Rs. 1,000. The Bengal Silk Committee under the guidance of some French experts have conducted cross-breeding experiments with a view to establish a mulberry hybrid of European quality. There is a Government sericulture farm at Berhampore, where, it is said, a pure white mulberry of silk worm is reared. The results of the Bengal Committee's labours may be summed up as follows: the only really effective method of dealing with the problem is to work up gradually to a point at which the whole of the seed cocoon necessary for the province will be supplied to rearers under Government supervision, and to establish gradually a sufficient number of large nurseries throughout the silk districts of the province.

In 1915 there was issued by the Agricultural Research Institute, Pusa, a Bulletin (No. 48 of 1915) entitled "First Report on the Experiments carried out at Pusa to improve the Mulberry Silk Industry." In a short Preliminary note Mr. Bainbridge Fletcher (Imperial Entomologist) explains that the object of the Bulletin is to place on record some of the more important experiments which were commenced at Pusa in the year 1910 and have since been carried on in the endeavour to fix a superior mulberry race of the Mulberry Silkworm which would not degenerate and which would yield silk better both in quality and output than that supplied by the mulberry races which are reared at present.

The report of the Central Nurseries—The report of the Agricultural Department, Bengal, for the year ending June 30, 1913, gives an account of a scheme which has been devised with the object of reclaiming the silk industry. The aim of the scheme is gradually to establish throughout the silk districts a sufficient number of central nurseries with rearing houses and thus enable the whole of the seed cocoons required in the

**Imperial Silk Specialist.**—At the end of 1913 it was decided that the first step to be taken to revive the silk industry should be the employment of a qualified expert who, after a careful study of the conditions not only in India but in other silk-producing countries will formulate recommendations for the consideration of Government. With the approval of the Secretary of State, Mr. H. Maxwell-Lefroy, formerly Imperial Entomologist and now Professor at the Imperial College of Science and Technology, South Kensington, has been appointed to the temporary post of Imperial Silk Specialist.

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# Indigo.

the Agricultural Research Institute, Perhap the most important problem for the natural indigo trade to solve is the marketing of the dye in the form most suitable to the dyers. Bihar is entitled to respect, dyes a lighter shade than either synthetic indigo or indigo freed from plant-indigos. It is further stated that 60 per cent of Bihar indigo dyes a fuller shade than 70 per cent Dutch-Java.

**Decline of the Industry**—Since synthetic indigo was put upon the market, in 1897, the natural indigo industry of India has declined very rapidly, apart from slight recoveries in 1906-07 and 1911-12, the decline continued without a break until the revival due to the impossibility of obtaining artificial dyes in sufficient quantities during the war. The figures for the last few years may be contrasted with those for the five years ending in 1897, in which the area under indigo averaged 2,400 square miles and the value of the exports over £3,000,000 a year.

Area under Indigo	Quantity Exported	Value of Exports
Acres	Cwts	£
1901-02	791,000	1,234,537
1902-03	646,000	803,708
1903-04	707,000	717,408
1904-05	477,000	536,403
1905-06	384,000	330,918
1906-07	421,000	466,985
1907-08	394,000	424,810
1908-09	284,000	326,986
1909-10	289,000	234,314
1910-11	276,000	223,529
1911-12	271,000	250,535
1912-13	220,000	147,000
1913-14	176,000	142,000

## Present Position—The crop is most im-

portant in Bihar and Madras, in the Punjab and United Provinces it now occupies little over 100 square miles altogether. In Bengal the crop is largely raised by British planters, in the other provinces chiefly by native cultivators. Scientific research work on questions connected with cultivation and manufacture has been carried out by the Bihar Planters' Association. It is hoped that good results may be obtained from the biological line of work—up But the official "Review of the Trade or India in 1913-14" says that "it would seem probable that unless great improvements can be effected in cheapening the method of pro-

ducing indigo dyes are obtained from the Indigofera, a genus of Leguminosae which comprises some 300 species, distributed throughout the tropical and warm temperate regions of the globe, India having about 40. Western India may be described as the headquarters of the species, so far as India is concerned, 25 being peculiar to that Presidency. On the eastern side of India, in Bihar, Bengal, Assam and Burma, there is a marked decrease in the number of species but a visible increase in the prevalence of those that are met with.

There is evidence that when Europeans first began to export the dye from India, it was procured from the Western Presidency and shipped from Surat. It was carried by the Portuguese to Lisbon and sold by them to the dyers of Holland, and it was the desire to obtain a more ample supply or dye stuff that led to the formation of the Dutch East India Company and so to the overthrow of the Portuguese supremacy in the East. Opposition to indigo in 17th century Europe was keen owing to its interference with the wool industry, but it was competition to obtain indigo from other sources than India that led to the first decline of the Indian indigo industry. In the middle of the eighteenth century, when the cultivation of indigo in the West Indies had been given up—partly on account of the high duties imposed upon it and partly because sugar and coffee were found to be more profitable—the industry was revived in India, and, as one of the many surprises of the industry, the province of Bengal was selected for this revival. It had not sooner been organized, however, than misunderstandings between the planters, their cultivators and the Government, which may be said to have culminated in Lord Macaulay's famous "Memorandum" of 1837. This led to another migration of the industry from Lower Bengal to Tirhut and the United Provinces. Here the troubles of the industry did not end, for the researchers of the chemical laboratories of Germany threatened the very existence of any natural vegetable dye. They first killed the madder dye of Europe, then the safflower, the lac and the dyes of India, and are now advancing rapidly with synthetic indigo, intent on the complete annihilation of the natural dye. Opinions differ on many aspects of the present vicissitude, meantime the exports from India have seriously declined, and satisfaction admittedly lies in the path of cheaper production both in cultivation and manufacture. These issues are being vigorously fought, but the future of the industry is accomplished, but the future of the industry can scarcely help being described as a great uncertainty. The issue is not the advantage of new regulations of land tenure, but one exclusively of natural versus synthetic indigo (see "Commercial Products of India"). In February 1913 a conference was held at Delhi when the possibility of assisting the natural indigo industry was considered from three points of view—agricultural, research and commercial. The agricultural or botanical side of the question is fully discussed by Mr. and Mrs. Howard of Punjab Bulletin Nos. 31 and 32 of 1913.

duction, either by selection of seed yielding the highest percentage of indigotin, or by chemical improvement in manufacture, or in similar ways, the industry is unfortunately doomed "The average wholesale price of Indigo in Calcutta in recent years is as follows —

Rs 238 per cwt  
 1913  
 1914 (July) " 184  
 1914 (Nov) " 438  
 1916 (March) " 652  
 1916 (April) " 652

**Crop Forecast**—The Director of Statistics in his first memorandum on the crop for the season 1915-16 states that the season has, on the whole, been favourable except in Bihar and Orissa and in the Punjab. The crop has been adversely affected by the recent floods in Bihar and Orissa, and in the Punjab by the deficiency of rainfall and the shortage of canal water. All the provinces except the Punjab show an increase in the area sown, the largest increase being in Madras and the United Provinces.

Tea.

Tea cultivation in India is chiefly in Assam, Bengal and Southern India, the cultivation elsewhere being comparatively unimportant. The latest available official statistics are those for the year 1914. They show a total area of 622,600 acres under tea, which is nearly 2 per cent. more than in 1913. Of this area, 566,500 acres were plucked in 1914. The total number of plantations was 4,405. The area under cultivation has increased in the last 10 years by 18 per cent and the production by 41 per cent. The average production per acre for the whole of India, excluding Burma (where the produce of the tea gardens is almost wholly converted into wet picked tea, which is eaten as a condiment) was 554 lbs in 1918 and 1914, as compared with 548 lbs in 1912.

**Area and Production**  
 The total area under tea in 1914 was divided between the different Provinces as follow —

Acres  
 231,900  
 144,148

Assam—  
 Surma Valley (Cachar and Sylhet) 144,148  
 Total, Assam 276,048  
 159,054

Bihar and Orissa (Chota Nagpur)  
 2,160  
 7,994  
 9,320  
 26,245  
 38,809  
 2,998

United Provinces  
 Punjab  
 Madras  
 Travancore and Cochin  
 Burma

Grand Total 622,628

The total production in 1914 was 312,821,000 lbs, divided between the different parts of India as follows —

Lbs  
 208,227,000  
 72,473,000  
 24,618,000  
 4,321,000  
 282,000

Total 312,821,000

The largest quantity of re-exports last year went to Holland and Russia. It was discovered that the ultimate destination of the tea sent to United States and Russia. The re-exports of Indian tea from the United Kingdom in the past five years have been as follows —

1910 18,587,000 lbs  
 1911 17,997,000  
 1912 19,368,000  
 1913 21,830,000  
 1914 30,389,000

The total quantity of Indian tea imported into the United Kingdom is not consumed there, a considerable portion being re-exported. The re-exports of Indian tea from the United Kingdom in the past five years have been as follows —

1910 18,587,000 lbs  
 1911 17,997,000  
 1912 19,368,000  
 1913 21,830,000  
 1914 30,389,000

The following were the exports in 1914-15 of Indian tea by sea —

United Kingdom 237,303,792  
 Russia 19,636,087  
 Other European Countries 91,70,29  
 Egypt 687,062  
 Elsewhere in Africa 723,455  
 Canada 10,950,615  
 U S A 2,737,534  
 Rest of America 228,611  
 Ceylon 3,292,620  
 China 8,308,802  
 Asiatic Turkey 1,229,826  
 Rest of Asia 8,762,923  
 Australasia 10,990,605

Total by Sea 300,771,081

The exports by land were as follows —

Afghanistan 682,864  
 1,785,616  
 Grand Total of 302,556,697

The sea and land exports together make, therefore, a Grand Total of 302,556,697

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Province	Area in acres (First forecast)	in cwt
Bihar and Orissa	60,800	38,900
Madras	126,000	39,600
Punjab	18,300	21,000
United Provinces	46,500	12,300
Bombay and Sind (including native States)	4,700	4,500
Bengal	1,600	1,300
Total	258,100	116,500
		38,500

Details for the provinces are given below —

...cultures of the Trade

— 111 —

1848

• The figures for years previous to 1905 of relate to the calendar year as it has been found impossible to procure complete data for the official year

The following table shows the consumption of Indian tea in India —

Year	Lbs
1909-10	13,477,297
1910-11	14,224,608
1911-12	15,294,472
Year	Lbs
1912-13	19,805,560
1913-14	22,797,000
1914-15	10,291,000

The following statement illustrates the variations in prices of the three principal grades of tea sold at the auction sales in Calcutta in 1888 and the five years ending 1914, the average price of 1901 to 1910 being taken as 100 in each case. The figures represent the average of the prices per pound of tea from all districts at each sale —

Year	Broken, Pekoe		Pekoe		Pekoe Souehong		Average for all description	
	Price	Varia- tion	Price	Varia- tion	Price	Varia- tion	Price	Varia- tion
1888	10 3	155	8 1	107	6 3	123	8 8	124
1910	7 3	110	7 0	119	6 4	125	7 10	112
1911	7 9	117	7 7	129	6 9	133	7 11	113
1912	7 5	112	6 11	114	5 9	113	7 5	110
1913	8 1	122	7 5	126	6 10	135	8 2	117
1914	7 10	119	7 8	130	6 11	136	8 3	118

### Capital and Labour

The number of persons employed in the industry in 1914 is returned at 587,868 permanently employed, and 88,602 temporarily employed. Compared with the returns of the previous year, there is an increase of 15,365 permanent employees and a decrease of 5,777 in the number of temporary hands. The capital of joint stock companies engaged in the production of tea amounted to about Rs 30 crores or over £20 1 millions, viz —

Companies registered in India 4,30,56,603 Rs

Companies registered in the United Kingdom (£17,284,848) 25,92,65,220

The Government of India's report on the production of tea in India in 1914, which contains the latest available official returns, states that of 98 companies registered in India, which have an aggregate paid-up capital of Rs 3,01 1 lacs, 91 declared dividends for 1913, amounting to 17 7 per cent on the aggregate capital of Rs 2,82 lacs, 86 companies have up to now declared dividends for 1914, amounting to 15 6 per cent on their aggregate capital of Rs 2,60 lacs. The value per Rs 100 of joint stock capital as calculated on the price of the shares of 92 companies quoted in the Calcutta share market was Rs 166 in March 1914, and of 95 companies was Rs 181 in March 1915. Similar details in available regarding 68 companies registered in the United Kingdom with sterling capital of £10 4 millions (Rs 15,63 lacs). The total dividends declared in 1914

The prospects of the tea industry continue bright. The demand for supplies for troops coupled with the prohibition of the manufacture of opium in France and of the sale of opium in Russia will no doubt result in a larger demand which may temporarily outstrip production. The exports by sea from British India in Indian tea from April to August 1915, were 14 per cent higher than in the corresponding period (April to August) of 1914. The exports in the five months of 1915 were 11 653,000 lbs more than in the corresponding period of 1914, and 15,136,000 lbs more than the normal. Owing to the times being abnormal it is unsafe to estimate with accuracy the immediate future of the tea position.

by 65 companies out of them with an aggregate capital of £10 2 millions (about Rs 15 26 lacs) amounted to 13 3 per cent. In 1914 the dividends so far declared by 42 companies came to 8 4 per cent on their aggregate capital of about £8 7 millions (Rs 12,91 lacs). Messrs Barry and Co. of Calcutta issued in June 1915, a summary of the audited accounts for the past year of 102 joint stock tea companies incorporated in Calcutta, representing a total surplus on the year's working, exclusive of commission on profits and dividend interest of Rs 65,37,000, the average profit being 20 7 per cent on the capital invested. Out of the above sum dividends have been paid representing an average return to shareholders of 16 3 per cent.

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# The Forests of India.

## Area of State Forests

The forests belonging to the State covered in 1913-14, 246,612 square miles, or roughly one-fourth of the whole of India and Burma. Of this 96,297 square miles are Reserved Forests, 8,390 square miles Protected Forests and 140,925 square miles Unclassed forests, by far the greater portion of the latter class occurring in Burma. The distribution of these areas is by no means uniform, the majority being found in Burma, Assam, Northern Bengal and along the foot of and extending into the Himalayas from the Nepal frontier westward through the United Provinces and the Punjab. In the Gangetic valley, vines and the Punjab, in Sind and Rajputana few forests occur except along the rivers, nor does one come across large wooded tracts until one enters the Central Provinces and the Godavari catchment area. From there southward in the Satpura and throughout the North and South Deccan there exist well distributed areas of forests, though generally not in large blocks, while on the Western Ghats, in the Nilgiris and Annamals, are found some of the finest teak forests of India proper. The East Coast of India is fairly well stocked with forest growth, especially in the Godavari basin, to the west of Cuttack and Puri and again in the Sunderbans, while the Andaman Isles are densely wooded.

## Revenue, Expenditure and Outturn

The Gross Revenue from State forests in 1913-14 amounted to Rs. 3,33,01,545, while the expenditure stood at 1,75,43,455, giving a net revenue of Rs. 1,57,58,090. The total out-turn of timber and fuel in that year amounted to 294 million cubic feet, out of which 18,89,872 cubic feet of fuel and 4,28,98,819 cubic feet of timber were given free to the local population. The number of bamboos removed came to nearly 302 million, valued at 18 lakhs of rupees and the number of cattle grazed amounted to 15,67,45,998, while the total revenue derived from Minor Products was 107 lakhs of rupees. From the above figures it will be readily understood that not only is the revenue realised by the State considerable but that the handling of such large amounts of Forest Produce requires a competent staff of officers.

## Management

The system under which the State forests are managed varies in different Provinces. In all cases, however, the aim of the Forest Department has been to introduce European Plans for their forests, based on European systems of management. The system most usually adopted in India, especially for work of the valuable teak and sal forests, is the Selection System. In other words maintaining an equal distribution of all age classes throughout the forest. In a few cases such as in deodar and other coniferous forests and also in a few instances in sal forests, the Uniform Method or a system by which trees of more or less uniform age are grouped together has been applied, and this method of mere intense

## Recruitment of the Staff

In order to introduce a system of conservative management on scientific lines it was of first importance to collect a staff of trained foresters, and as no forest training college existed at that period in England, the Government of India, as a commencement, enlisted the services of three German Forest Officers. The first of these to come to India was the late Sir Detrich Brandis, F.R.S., and it was to his extraordinary energy and abilities that a sound foundation was originally laid to the scientific management of the State forests. Soon after his arrival in India, the staff was materially strengthened by the recruitment of officers from the Indian Army. In 1869 the first batch of technically-trained English forest officers joined the service, having received their training either in Germany or France, and this system of continuing training remained in force until 1876, after which the training was carried on entirely at the National Forest school of Nagpur. The first batch of Cooper's Hill trained foresters arrived in India in 1887 and the last in 1907, after which date the training took place at Oxford University, and later also at the Universities of Cambridge, Edinburgh and Dublin. In this way the Government of India have been able to collect by degrees a highly trained staff of men to carry on the administration of their State forests. The total strength of the Imperial Establishment at the present time is 237, of whom 29 are administrative officers and 219 Executive officers, among the latter are included Inspectors and Research Officers who are employed at the Forest Research Institute, Dehra Dun in order to keep pace with the recruitment of the superior staff, a Forest School was opened in 1878 at Dehra Dun for the training of Forest Rangers. Recently this School has been converted into a College and the instruction extended to include a course for training men for the Provincial Services. Besides the Forest College at Dehra two new Rangers' Schools have been established, one at Pithampur in Burma and the other at Coimbatore in Madras. Besides this nearly every Province has established a local Forest School for the training of the lower subordinate establishments.

The necessity of protecting the vast forest areas in India and Burma was first recognised in the Madras Presidency nearly a century ago, when steps were taken to protect on a limited scale the more valuable areas in the Annamals, while in December 1886 Doctor Clegghorn was appointed the first Conservator of Forests in that Presidency. It was not, however, until 1886 that Lord Dalhousie laid down a definite policy with the object of affording more widespread protection to the vast areas of valuable forest in British India. The action taken by the Supreme Government came none too soon, for already in many localities the wanton hacking by the local population and even more so by timber contractors, had reduced the forests to a state from which they could not be expected to recover for many years, even under the strictest protection.





**Commercial Development**

—In recent years there has been a noticeable increase in the demand for forest products and several industries dependent on their supply have been or are about to be started. One of the most important of these is the utilisation of bamboo, sarranah grasses and firewood for the manufacture of paper-pulp, and to assist the development of this industry, a special expert has been employed. With the assistance of the Tifaghar Paper Mills Company, Limited, trials in the manufacture of bamboo pulp have been carried out successfully on a commercial scale, and concessions for the extraction of bamboos have been granted to two firms in Burma and Bengal. In the Punjab a concession for the extraction of spruce and silver fir from the Kulu forest for the manufacture of wood pulp has been granted. Matters are less advanced as regards the grass pulp industry. The extraction of tanning materials has received attention for some time past, particularly in the matter of obtaining a satisfactory new distillation process. The ser-extract from the bark of mangroves. During recent years much has been done to stimulate the local manufacture of matches, tests with numerous Indian woods have been carried out and a report regarding their suitability and the prospects of this industry has been issued. Several match factories on countries

under departmental management, marked progress has been made in the manufacture of **rosin and turpentine** from crude resin obtained by tapping pine trees in the Himalayan forest. In the Punjab and the United Provinces, these turned out 27.429 mannds of rosin and 6,584 mannds of rosin and 14,604 gallons of turpentine in year. (a) The Indian demand for these products, which are largely used in the manufacture of paper paints and varnishes is considerable, and the local output has already exceeded imports from other countries

another important forest industry in which progress for some years past

ment of less durable timbers have been in progress for some years past

forests in this country, but as the supply of large quantities of **sleepers** have always been obtained by the Indian railways from the steadily grown, especially in the Assam Valley, portion or the output of the forests, and has in Assam, where it absorbs a considerable box industry has received special attention can be assured, there is no reason why the industry should not grow rapidly. The sufficient supply of match woods of good quality modern lines have been established, and if

The statement below relating to **Exports of Forest Products** is taken from the "Annual Return of Statistics relating to Forest Administration in British India" for 1913-14, recently issued —

Articles or Forest Produce	Quantity in Tons or of teak and other timbers, cubic feet		Value at Port or shipment in 1913-14
	Average of 5 years 1908-09 to 1912-13	In 1913-14	Total
Caoutchouc, raw	310	1,103	78,67,293
Latex	1,831	1,093	1,07,089
Shell	18,291	1,768	1,69,78,138
Stick, seed and other kind	2,008	2,007	13,72,774
Myristicins	3,444	2,945	9,32,338
Cardamoms	72,243	61,870	36,94,383
Sandal, Ebony and other ornamental woods	142	167	7,49,919
Other timbers	43,145	30,737	19,48,337
Teak	6,098	7,935	7,09,784
Total in 1913-14			Rs. 4,54,25,118
			Rs. 4,67,80,613
			Rs. 4,96,36,932
			Rs. 4,26,71,544
			Rs. 4,20,96,717

(a) Quantity (whether by weight or measurement) not recorded  
(b) Corrected figure includes "other timbers" previously excluded.



## RUBBER CULTIVATION.

The most important rubber-yielding tree found growing naturally in the forests of India is *Ficus religiosa*, a very large tree of the outer Himalayas from Nepal eastwards, in Assam, the Khasia Hills and Upper Burma. It has also been cultivated in Assam in the Charduar plantation in the Tezpur Sub-Division as also in the Khasi plantation of the Gauhati Sub-Division in the Kamrup Division. There are also a number of other rubber-yielding trees found in the Indian and Burman forests from which rubber can be collected on terms quoted by Government. Attempts have been made to cultivate Para, Ceara and Castilla in various parts of India and Burma. In India proper the chief attempts were made on the west coast, about 180 acres being planted from 1908 onward at Geopora. Similar attempts have been made in Madras but at present Para rubber is being grown as a commercial product rather in Burma than the rest of India.

The production of rubber in India is confined to Assam, Burma, and the Madras Presidency —

Assam	Madras	Burma	Total
4,681	137,480	29,544	46,247
4,681	1,096,476	4,911,399	6,685,305
No of trees	Acres		

The yield of Assam plantations is relatively small, and the number of trees to the acre is much less than in Madras and Burma. The

The total imports of matches into British India in 1914-15 amounted to nearly 15½ millions gross boxes, valued at Rs 113 lakhs. The share of Japan in the import trade was 61 per cent and that of Sweden 24 per cent. It is true that there was a steady drop in the imports of matches from Japan during the first four months of the war, but this was followed by a very rapid rise in December 1914 onwards. In normal years matches are also imported from Austria, Hungary, Germany and Belgium. In the opinion of the Forest experts at Dehra Dun there is an abundance of raw material in this country for match manufacture.

Indian timbers for matches — In an article in the *Indian Agricultural* the woods of the following species are said to be employed in Burma for match splints: *Bombax insignis*, *B. malabaricum* (simul), *Anthocaphalus Cadamba* (kadamb), *Sarcocaphalus cordatus*, *Spondias manguiera* (amra), and *Engelhardia speciosa* (palash). These woods are not the best for the purpose, but are those most easily procurable. There are other kinds of white wood, such as poplar, pine, willow, and alder, in abundant

## MATCH FACTORIES.

quantities, but they are difficult to extract and transport and are therefore costly. The attempts to manufacture matches in India have not hitherto been attended with great success, but recently two well-equipped factories have been started in Burma which give promise of good results. One of these is at Mandalay, and is under European management. Further investigations are said to be necessary in order to settle the question as to the most suitable woods to employ, and when these have been brought to a satisfactory conclusion it is thought that Burma will be able to produce matches of first-class quality. It may be added that in 1912, the latest year for which complete statistics are available, there were six match factories in India.

The **Law in India** prohibiting the importation of the old sulphur matches as from July 1st, 1913, has not seriously affected the position of the Swedish manufacturers, "as they were able to supply another" strike-anywhere" match to take the place of the kind then prohibited, but as the new kind is dearer to manufacture the prices have gone up, and are likely to rise still further.

The Commissioner of Settlements and Land Records, Burma, gives the following rough estimates of future production —

1915	1,500,000 lbs.
1916	1,800,000 "
1917	3,000,000 "

Burmese — For fuller details see "Director of the Economic Products of India" and the abridged edition of the same published in 1908 under the title "The Commercial products of India," by Sir George Watts, and the "Commercial Guide to the Forest Economie Products of India," by R. S. Pearson, published by the Government Press, Calcutta, 1912.

There has been a steady development in the exports of rubber from India. The exports increased from 23,204 cwt, valued at Rs 79 lakhs, in 1913-14 to the record figure of 32,823 cwt, valued at Rs 93½ lakhs, in the year 1914-15. India, including Burma and the Merqui, has increased its plantations from 46,000 acres in 1913—the year for which statistics are given above—to 65,000 acres in 1914.

The average cost of production is about 1s 6d to 1s 10½d per lb. Capital invested is from £22 to £25 per acre. The average yield in Burma from 4 to 6 years old trees is 1½ to 3 lbs per tree per year. The four years from the date of planting. The trees can be tapped in 9 to 12 months old. The trees can be tapped in being less than six years old are not yet productive. All planting is stump planting about double that of Burma, where most of the trees doubtless that of Burma in 1913 was more than



electricity the demand for mineral and chemical products in India has steadily grown. Before long the stage must be reached at which the variety and quantity of products required, but now imported, will satisfy the conditions necessary for the local production of those which can be economically manufactured and for the supply of groups of industries for the purpose of output.—The total value of the chemicals for which returns are available for the years 1913 and 1914 was as follows —

The Federal Reserve Bank of New York has announced that it will purchase \$1 billion of U.S. Treasury bills from the Treasury Department. The purchase is part of a larger program to support the government's financing needs. The bills are being purchased at a discount to their face value. The Federal Reserve Bank of New York is the only one of the twelve regional banks that has announced such a purchase. The purchase is expected to be completed by the end of the year.

Coal	3,793,197	5
Gold	2,291,917	5
Petroleum	1,034,386	5
Manganese-ore	1,211,034	5
Salt	472,043	5
Mica	302,564	5
Saltpetre	200,808	5
Lead-ore and Lead	63,563	5
Tungsten-ore	127,763	5
	178,543	5
	202,320	5
	272,462	5
	2,37,310	5
	483,289	5
	877,264	5
	3,907,880	5
	2,338,355	5
	1,034,386	5
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	1,211,034	5
	472,043	5
	302,564	5
	200,808	5
	63,563	5
	127,763	5
	178,543	

**Coal.**

Most of the coal raised in India comes from the Bengal-Gondwana coal-fields. Outside the Bengal the most important mines are those at Singrauli in Hyderabad, but there are a number of smaller mines which have been worked at one time or another.

With the spread of railways, the development of manufactures connected with jute, cotton and paper, and the gradually extended use of

[illegible]

There was a small rise of 1·5 per cent in quantity and about 3 per cent in value of the Indian output of coal in 1914 which has now reached nearly 16½ million tons with a value of £3,972,850. The pit's month value varied from Rs 3 in Central India to Rs 9 in Baluchistan, the figures for the chief coalfields, however, being Rs 3-8-4 for the fields of Bihar and Orissa and Rs 3-13-10 for those of Bengal. There has been a very marked rise in recent years in the case of Assam coal, which has risen from under Rs 5 in 1912 to Rs 7 in 1914. The pit's month value has risen both in the Jherian and Raniganj fields, but has fallen in Central India and in the Nizam's Territory, and has remained steady in the Punjab.

Imports Tons	Exports Tons	Declared Value per ton	Output Tons
252,393	694,832	Rs a p 7 13 2	8,216,706
179,986	838,149	7 13 3	8,417,739
257,203	935,350	7 15 11	9,783,250
308,348	727,881	8 1 7	11,147,339
455,806	571,582	8 13 5	12,769,635
1909-10	758,823	8 13 7	11,870,064
1910-11	889,601	8 10 6	12,047,413
1911-12	873,987	8 13 0	12,715,534
1912-13	881,239	10 0 4	14,706,339
1913-14	723,641	9 8 11	16,208,009
1914-15	694,000	8 14 2	16,464,000

Provincial production of coal during the years 1917 and 1918

Province	1912	1913
Alameda	27,100	270,502
Bakersfield	14,500	52,902
Bellevue	1,000	1,019,089
Del Norte	9,120	10,227,337
El Dorado	119,921	118,178
El Paso	203,938	203,001
Hamilton	181,652	352,131
Inyo	50	90
Los Angeles	18,400	51,010
Mariposa	18,751	18,781
Monterey	11,706,333	10,208,000

The growth of the coal mining industry may be readily traced from the following table showing the number of joint stock companies and the amount of capital raised in the period 1850-1907.

Year	Number of joint stock companies	Amount of capital raised (£ millions)
1850-59	10	0.1
1860-69	15	0.2
1870-79	25	0.5
1880-89	45	1.5
1890-99	100	4.0
1900-07	120	5.0

**IRON ORE**

**Railways and Coal**—The latest estimate for the year ending 1911 shows that the total output of the coal mines in Great Britain was 13,000,000 tons, valued at £150,000,000. The output of the coal mines in Great Britain was 13,000,000 tons, valued at £150,000,000. The output of the coal mines in Great Britain was 13,000,000 tons, valued at £150,000,000.

[illegible]

## MANGANESE ORE.

This industry commenced some twenty years ago by quarrying the deposits of the Vizagapatnam district, and from an output of 674 tons in 1892, the production rose rapidly to 92,008 tons in 1900 when the richer deposits in the Central Provinces were also attracted, and are now yielding a larger quantity of ore than the Vizagapatnam mines. India now estimates with Russia as the first manganese-producing country in the world. The most important deposits occur in the Central Provinces, Madras, Central India, and Mysore—the largest supply coming from the Central Provinces. The uses to which the ore is put are somewhat varied. The peroxide is used by glass manufacturers to destroy the green colour in glass making, and it is also used in porcelain painting and glazing for the brown colour which it yields. The ore is now used in the manufacture of ferro-manganese for use in steel manufacture. Since 1904, when the Exports of Manganese ore from India during the years 1913-14 and 1914-15 are shown in the following table —

To		Total	
United Kingdom	Tons	United States	Tons
Belgium	28,776	France	61,278
187,821	106,827	12,13,800	16,01,205
103,847	19,14,722	31,84,620	19,14,722
718,049	42,17,102	Rs	Rs
1913-14		1914-15	
42,675 tons	1,21,31,419	40,690	75,30,283
Rs	Rs	Tons	Tons
227,281	66,043	27,437	6,26,175
39,72,171	11,02,545	78,503	11,02,545
8,43,460	19,14,722	46,826	8,43,460
10,85,932	31,84,620	66,043	10,85,932
Rs	Rs	Rs	Rs

The fall in prices in the latter part of 1907 produced by 1909 an almost complete cessation of mining for lower grades of ore at mines far removed from railways. Owing to an excess of production over exports the stocks on the mines at the end of 1908 stood at the high total of nearly 300,000 tons. The rise in the price of ore during 1910 resulted in a considerable increase in the total production, namely from

## GOLD.

642,675 tons in 1909 to 800,907 tons in 1910. At the same time there was a slight fall in the value of the output. In 1912 there was a rise of over 36 per cent in the value of the output. The Burma Gold Dredging Company holds a right to dredge for gold in the bed of the Irrawaddy river and notwithstanding the obstacles encountered from time to time in the shape of floods, etc., the company has so far been fairly successful in its operations. The small quantity of gold produced in the Punjab, the Central Provinces, and the United Provinces is obtained by washing. Gold washing is carried on in a great many districts in India, but there is no complete record of the amount obtained in this way. The average earnings of the workers are very small, and the gold thus won is used locally for making jewellery. The latest statistics available for the whole of India are for 1914 when the gold produced in Mysore and elsewhere in India amounted to 607,383 oz valued at £2,338,355

The greater part of the total output of gold in India is derived from the Kolar gold field in Mysore. During the last decade the production of this mine reached its highest point in 1906 when 616,758 ounces were raised. In 1907 the quantity won was 565,208 ounces and this figure fell to 535,085 ounces in 1907. The figures for the latter years reveal a small improvement. The Nizam's mine at Hutti in Hyderabad comes next, but at a respectable distance, to the Kolar gold field. This mine was opened in 1903. The only other mines from which gold was raised were those in the Dharwar district of Bombay and the Anantapur district of Madras. The Dharwar mines gave an output of 2,998 ounces in 1911 but work there ceased in 1912. The Anantapur mines gave their first output of gold during the year 1910, the amount being 2,582 ounces, valued at Rs. 1,51,800. Gold mining was carried on in the North Arcot district of Madras from 1893 till 1900, the highest yield (2,854 ounces) being obtained in the year 1898. The Kyaukpadaung mine in Upper Burma was worked until 1903, when the pay chute was lost and the mine closed down. In 1902 dredging operations were started on the Irrawaddy river near Myitkyna,





Inspection of Mines

During the year 1911 the average number of men working in and about the mines registered by the Indian Mines Act was 185,211, of whom 120,071 worked underground and 65,140 on the surface. One hundred and fifteen thousand and one hundred and seventy-four were adult males 64,170 were adult females and 5,888 were children under 12 years of age. This is an increase of 3,951 workers or 2.18 per cent.

**Accidents**—During the year 1911, 26 mines registered by the Indian Mines Act, 1901, there were 152 fatal accidents, being an increase of 16, as compared with the number in 1913, and an increase of 27 as compared with the average number of fatal accidents.

These accidents involved the loss of 191 lives. This is a decrease of 20 upon the number of deaths in 1911.

There was no single accident involving a large death toll, as was unfortunately the case in 1913. In one case, however, 6 lives were lost owing to a fall of roof in a coal mine, and in two cases 5 lives were lost, one by an explosion of gunpowder in a salt mine, and the other by an intrusion of water in a mica mine. In five cases 3 persons, and in fifteen cases 2 persons were killed.

Of these 152 accidents the Chief Inspector of Mines regards (a) 77 as being due to misadventure, (b) 42 to the fault of the deceased, (c) 5 to the fault of fellow workmen, (d) 12 to the fault of subordinate officials, and (e) 16 to the fault of the management.

Very many of these accidents might have been prevented by the exercise of ordinary care and forethought on the part of both officials and men, and the Chief Inspector of Mines is satisfied that only by closer supervision and stricter discipline can their number be diminished. Such accidents result from persons pasting through fences into old workings to get easily worked coal, from persons sitting in dangerous places or under roof coal at which they have been working, from persons being struck down by falling roof and sides as they travel to and from their working places, and from disobedience to an official's orders in trivial matters.

The death-rate per thousand and persons employed was 1.03, while that of the preceding five years was 1.17. At coal mines only other figures were 1.05 and 1.34, and at mines in England during the ten years ending with and including 1913, the death-rate per thousand persons employed varied from 1.17 (lowest) to 6.69 (highest). The death-rate per million of tons raised at coal mines only was 9.22 while that of the preceding five years was 11.90, ending with and including 1913, the death-rate per million tons raised varied from 4.29 (lowest) to 6.37 (highest).

**Chief Inspector of Mines in India, G. F. Adams, M. Inst., C. E.**

**Bibliography**—Report of the Chief Inspector of Mines in India, under the Indian Mines Act (VIII of 1901) for 1911 by G. F. Adams, (Chief Inspector of Mines in India).

**Gem Stones**—The only precious and semi-precious stones at present mined in India are the diamond, ruby, sapphire, spinel, tourmaline, garnet, rock-crystal, agate, cornelian, jadeite and amber. Amber has already been referred to, of the rest only the ruby, sapphire and jadeite attain any considerable value in produce and the export of the latter has declined owing to the disadvantages in China, which is the chief purchaser of Burmese jadeite. The output of diamonds is comparatively unimportant and the ruby-mining industry of Burma has lately undergone a favorable change. In 1914 the output of gems was 304,042 carats.

**Tungsten**—A marked feature in the development of the mineral industry of India during recent years is the rapid rise of the wolfram industry in the district of Mandalay and Yogy in Lower Burma. Although there is an output of 7 tons from Mandalay in 1909 the industry dates practically from the following year 1910. The output of wolfram in Burma rose from 1,688 tons valued at £127,762 in 1913 to 2,326 tons valued at £178,543 in 1914-15. Had it not been for this location of the arrangements for disposing of ore during the latter part of last year, the higher The industry, however, subsequently recovered itself, and owing to the demand for wolfram for the manufacture of tungsten-steel, special regulations have been made for the mining of it under the Dence or India Act.

According to the Director of the Geological Survey, the total production of the world is about 8,000 tons 70 per cent of tungstic trioxide ranging from 60 to 70 per cent of tungstic trioxide. Of this Burma produces one quarter. In Sumatra the mining of wolfram is a recent development. Wolfram is also produced in Australia and in the Malay Peninsula. Formerly Germany used to take over 60 per cent of the total exports from India, but this is one of the minerals of which the export was restricted owing to the war. This shipments for Germany were diverted in 1914-15 to the United Kingdom, which took 1,118 tons or 58 per cent of total exports of 1,910 tons, valued at Rs 26½ lakhs.

**Radio-active Minerals**—The General Report of the Director of the Geological Survey of India for 1913 includes a brief report by H. C. Burton on an occurrence of pitchblende at mica mines near Singur, Gaya district, Bengal. The pitchblende occurs as rounded nodules in a pegmatite that is intrusive in the mica schists. Other minerals occurring in the pegmatite are mica, tripelite, ilmenite, tourmaline, and uranium oxide, whitish columnar, zircon, and corundum have also been recorded. Of these minerals tripelite is stated to be the commonest. It is associated so persistently with the pitchblende and uranium oxide that its presence is taken as an indication of the presence of these minerals. Many of the pitchblende nodules occur in a matrix of tripelite, some occur in a felspathic matrix. One nodule of pitchblende weighing 36 lb has been obtained. The pegmatite has been mined for many years for mica. As yet, not much pitchblende has been obtained, but one pit has yielded up to 4½ cwt present about 4 cwt of the mineral.



them, have come down in an unbroken tradition from the Khamayana and Alahabharata. The old types survive side by side with the copies of articles imported from the blue de la Pail, and in any Indian jeweller's shop a bewildering mixture of the archaic and the modern is to be seen.

### Shawl and Carpet Weaving

It is only in Northern India (more especially in Kashmir) that the spinning and weaving of wool extends to the production of highly-finished and artistic goods. Scattered here and there all over the country are hand loom factories where coarse blankets, carpets, and other fabrics are produced. These indigenous wool industries are most important in the Punjab. The great centre of shawl production is Kashmir, the industry has also been carried on for many years in parts of the Punjab, where it was introduced by colonies of Kashmir weavers. France was for many years the chief foreign market for Kashmir shawls, and the trade, which was damaged also by the competition of cheap imitations produced at Paisley, never recovered from the effects of the Franco-German War. The bulk of the Kashmir shawl-weavers became carpet-weavers or agriculturists. The latest report from the Punjab regards the case of the genuine shawl industry as "almost hopeless." Carpet-weaving is carried on in various parts of the country. It is one of the many industries which is said to have been ruined by modern civilisation, and in so far as many carpet factories in India are turning out an inferior article, according to designs furnished by dealers in Europe, this is correct. But it is wrong to ascribe the cheapening of the caste weaver's product and his increased output to underweaving by those jails in which the weaving of carpets has been introduced as an occupation for prisoners. On the other hand the jails, and especially that at Yerrowda, near Poona, have set a high standard by conserving old designs, by using good material, and by avoiding the use of machine dyes. Since the London Exhibition of 1881 a considerable export trade in Indian pile carpets has been created. American retailers, which cater for the American market in particular, is the most important carpet-weaving centre in India, but there are factories in many other places in Northern India, Rajputana, Central India and the United Provinces. Cotton and woolen carpets in other than pile stitch are made all over India. They are known as *dari* (a rug) and *shatranji* (a carpet) and are made in great variety. The poorer classes of Mahomedans generally use the cotton manufactures as praying carpets.

Apart from woven mats or carpets there is manufactured a great variety of so called mats made from grass and other materials such as rice, bamboo, cori, date and other palm leaves. Mats of rather screens (lattices) made of the sweetly scented *Ahas khas* are hung in front of doors, etc., to afford shade and to cool, by evaporation, the air which passes through the moistened texture. Bamboo mats are manufactured here and there all over India, and in Bengal more especially *durma* mats (those constructed of reeds) are all but

style of punched brass, which is as a rule bad in design and execution, and the engraved or repousse work in polished brass that comes in large quantities from Jaipur. Better than either of these are the perforated and repousse copper work of Lucknow, the best products of Burma. Ordinary domestic utensils, which are free from ornamentation so that they can be readily secured, and the more elaborate implements used for religious ceremonies are among the most and beautiful interesting metal wares in India, but they vary in style and finish throughout the country. Sir George Vath writes —

"The copper or brass vessel of most general use by the Hindus is the *loti*, a globular melon-shaped vessel flattened from the top and having an elegantly flattered rim by which it is carried suspended between the fingers and thumb in shape this doubtless originated from the partially expanded flowers of the sacred lotus, its name thus coming from the same root as the Latin *lotus*," "washed," and the English name *lot* and *loti* and their respective uses have given birth to two widely different forms of both domestic and decorative metal work characteristic of India. For example, the spout and the use of copper, more especially when fluted, has so originated a whole range of forms and designs not only quite unknown to the Hindus but next to impossible with the materials permitted by their religion." It is scarcely any longer to divide the gold and silver plate work of India into four or five well defined classes distinguished by the style of ornamentation, as the workers in these metals have been quick to adopt a variety of European models in Indian mythological medallions, in imitation of the engraved style of Southern India art, still form the characteristic feature of much of the silver work in Bombay two distinctive forms survive, the *Doona* and *Kutchi* of these the former is a deep form of repousse, the silver usually being beaten origin in shallow repousse. Hangoon work is generally known by the troseled surface of the silver and *Aloumlein* work by the silver being either polished or burnished. But in almost every case the design of one province is copied in another, and the best forms of ornamentation, such as the shawl pattern of Kashmir, have fallen into disuse either because the smiths have found by experience that it is just as easy to sell inferior work as great varieties of form and style are to be seen in the arms and jewellery made in India. Sir George Birdwood in his "Industrial Arts of India" says that "the forms of Indian jewellery as well as of gold and silver plate, and the chasings and embossments decorating

stones and silk, make a great number of classifi-  
cations of this work possible. A rough divi-  
sion between the two forms is that the massive  
and is called *carvings* and the light and graceful  
*carvings*.

### IVORY

The carving and making of ivory are still, though perhaps in diminished importance, materials much practised in India. The best material used is African ivory, which is whiter and of closer grain than the Indian, but Sir George Watt has pointed out that the "Asian tooth" ivory, or Mammoth ivory of Siberia, is also used by Indian workers. The centres of the craft are Delhi, Muzirisbad in Bengal, Mysore, Travancore, and Madras. A curious fact about this industry is that, though carving is generally an hereditary occupation, there is no special caste identified with the craft like that of the silver smiths, and this being pulled away from and not drawn towards the Punjab dam stitch, known as *pullahar*, but most of the varieties still await their historian. Dam stitch is chiefly used on coarse cotton and chain silk, on silk or woollen fabrics, the former covering the texture of the latter ornamenting parts of it. European demands have led to the production of large quantities of silk embroidery, in which coloured silks and gold and silver wire are employed for curtains, table cloths and so on. Another common form of embroidery is what is called *chikan* work on some white washing material such as calico or muslin, in this the most usual form of stitch is the satin stitch combined with a form of button-holing. The manufacture of lace and knit-ting have been introduced into India by mis-sionaries. "Laid" embroidery with gold and silver wire (called *larchob* work because it is done on a frame) is common throughout the country in different forms. The wires are drawn in a number of centres, particularly in Lahore, Delhi, Agra, and Benares. The details of wire drawing and the form of stitch, together with the combination with precious

### Embroidery

This is one of the most important of the art industries of India attaining its highest development in Northern India. The stitches employed in the various kinds of work are numerous, but all have this in common that they are formed by the needle being pulled away from and not drawn towards the Punjab dam stitch, known as *pullahar*, but most of the varieties still await their historian. Dam stitch is chiefly used on coarse cotton and chain silk, on silk or woollen fabrics, the former covering the texture of the latter ornamenting parts of it. European demands have led to the production of large quantities of silk embroidery, in which coloured silks and gold and silver wire are employed for curtains, table cloths and so on. Another common form of embroidery is what is called *chikan* work on some white washing material such as calico or muslin, in this the most usual form of stitch is the satin stitch combined with a form of button-holing. The manufacture of lace and knit-ting have been introduced into India by mis-sionaries. "Laid" embroidery with gold and silver wire (called *larchob* work because it is done on a frame) is common throughout the country in different forms. The wires are drawn in a number of centres, particularly in Lahore, Delhi, Agra, and Benares. The details of wire drawing and the form of stitch, together with the combination with precious

Part of that division of handicrafts which is vaguely connected under the term "the arts" is the subject of an article elsewhere in this book. Apart from painting, it is not a very considerable division. Statuary, except the wide-spread production of statuettes (in stone, wood, or cast metal) of mythological subjects, is little practised. Various brass workers are expert in reproducing in miniature scenes of Indian life and animals of the country, and at Lucknow some realistic terra cotta statuettes are produced. Wherever wood-carving is practised, and particularly in Burma, statuary in that material is turned out and is used chiefly for decorative purposes.

### Statuary



In 1906 the Government of Bengal placed Sir H. Campbell C. S., I.C.S. (now Sir G. Grierson), a senior Member of their Board of Revenue, on special duty in order to inquire into the same subject. He made a comprehensive and valuable report from which followed two important results—(1) The recommendation that a survey should be made of the different possibilities in the Ray or land of the immediately vested upon by Government and relieved itself in that way set to work in the early part of 1907. A few days before the close of the year, and (2) I have already mentioned was established that the Ryotwari system was generally misapplied in the Sunderbans.

The results obtained by Dr. Atkins were of great importance. He showed that trimethyl could be carried on successfully throughout the reaction and concluded that a proper correlation between the development of the fisheries would yield a profitable return on capital invested. He indicated that the lines on which the fishery could be exploited.

While the *Lebensversicherung* is not a *Kapitalversicherung* in the sense of the *Lebensversicherungsgesetz*, it is a *Lebensversicherung* in the sense of the *Lebensversicherungsgesetz*.

The Fishery Department, after following up Dr. Jenkins' investigation, agreed the sum of Rs. 10 lakhs is capable of furnishing fairly not far short of 200,000 man-days or fresh fish, while they point out that the area covered by the potentially marine fisheries having been shown to be roughly 85,000 square miles, the 5 sq. m. area must be well nigh innumerable. From statistics which have been compiled it has further been ascertained that the annual imports of fish to Calcutta from all sources roughly represent 26 per cent of the actual requirements.

The future development of the fisheries on communal lines will not only require some additional labour, but will also necessitate some adaptation of the general conditions and mental lot of the fishermen, because the land which the occupation or fishing and the rural life is held has led to the whole of the population or people with no capital, no education, no initiative and no business capacity. The most hopeful sign is officially stated to be the prospect of the special co-operative credit societies among the fishermen in the near future. The situation is obviously one in which there is ample scope for a development of this kind. Meanwhile the Fisheries Department are carrying on persistent, careful and extensive propaganda work as regards actual fishing in the department and directing their concentration on two points—(1) the possibility of increasing the number of fish present, and (2) the possibility of capturing a larger proportion.

**Bombay.**

effective check on the divers as regards the pearls. After about five years, when the yield of shell had decreased, they all left. The industry was then carried on by the Burmese

The Bombay sea fisheries are important and give employment to numerous castes, chief of which are the Kolis. Pomfret, sole, stone, and lady-fish are sold fresh, while others, such as the bombil, are salted and dried. Large quantities of small fry are sold as manure. The palia, found in the Indus, and the matal fish and mahseer are the principal fresh-water

Sea-fishing is carried on by the Mohamud tribe of Musalmans, who reside for the most part in Hamlet near Karachi. The principal fish caught on the coast are sharks rays, and skates. The pearl oyster is found at several

**Burma.**

A problem at the present time is the absence of laws in Bengal. The Fisheries Department found necessity in every other civilised country in order to protect both fish and the community at large. It must be realised that the Government will be required to legislate in order to protect both fish and the community at large. It must be realised that the Government will be required to legislate in order to protect both fish and the community at large. It must be realised that the Government will be required to legislate in order to protect both fish and the community at large.

the natural

places, and the fish conducted pearl operations on their own account. Under British rule, the right has been let for a small sum, but the pearls are very inferior in size and quality, so that the industry has greatly declined during the last thirty years. At present practically no pearl fishing is carried on. Considerable fisheries also exist in the river Indus, chiefly for the fish known as palli, which are annually leased out by Government for about Rs. 20,000.

But for a province with such a length of sea board and with the estuary of the Indus within its borders the fishing population is singularly small. The fishing boats and appliances generally are very small and the fishermen do not go out in rough weather. The best fishing season is the cold weather months of December, January and February, and it is probable that with such a very brief season the harvest of the population. The fishing castes frequently desert their caste occupation for others, according to the 1911 census report. When the two groups, fishermen and fish dealers, are amalgamated there is a decrease of 8,000 in the aggregate, which can only be explained by their deserting their ancestral occupation.

The Government of Baroda, a State lying within the borders of the Bombay Presidency being desirous of introducing oyster culture into the coast districts of their State, have delegated a student to Pullat, where the Madras Fisheries Department are engaged in similar work, and he is receiving practical instruction.

## Madras

The Madras Irrigation tanks usually contain coarse fish, the right of netting which is disposed of annually. The sea-fisheries along the coast employ thousands of persons, and the salting of the catches is a very considerable industry. The development of the fisheries of the Presidency is now under investigation by Government.

carried on in special yards under Government supervision, and is an important industry. The report of the Madras Fisheries Department for 1913-14 stated that the principal operations under organisation were the West Coast station at Tanur for experimental curing, cranning and the production of fish oil and guano, the oyster farm at Pullat, the Sambaswami fish farm, the stocking of certain tanks, the preparation of important piscicultural projects, including the Tuticorin marine fish farm, the Nellore currying and murel farm, the Colar Lake fish hatchery and murel farm, the accumulation of such work in anti-malarial operations such as the breeding and distribution of larvicidal fish, the conservation of the upper waters of the Nalliyar and Moyar on the lower slopes of the Nilgiris, the conservation and development of the trout in the Upper Nilgiris, and work by the newly appointed Oil Chemist.

At Tanur the percentage of first class yellow oil now obtained averages above 50 per cent of the output. This oil was recently described by a European buyer as "unique" by reason of its purity, colour and slight odour.

An inspection of the Pull Bay waters (between India and Ceylon) near Pondicherry resulted in the discovery of a fairly mature bed of oysters, estimated at twenty millions in number. The fact is remarkable because no pearl fishery or pearl oyster bed has ever been known before in the Pull Bay, which is north of the Pamban channel, all fisheries having hitherto taken place to the south in the Gulf of Mannar, where alone pearl oyster beds have been worked from time immemorial. There was drawn up during the year a scheme for cultivating the pearl oyster under controllable conditions in a regular farm, and for introducing the growth of pearls, both attached and free, in these controlled oysters. From Japanese facts it is almost certain that the farm will be very lucrative, even if only "attached" pearls are grown, but inducing the growth of the more valuable "free" pearls, and have already forwarded a paper to the Linnean Society with specimens of the results in this direction.

Progress was continued during 1913 with out the development of any important branch of work. The Madras Government issued a Resolution on the retirement of Sir F. Nicholson, the honorary Director of the Fisheries Department, expressing their appreciation of his devoted service and intimate, versatile making his work a success.













## The Opium Trade.

The exports of Bengal opium to foreign countries have been in recent years —

Value	Rs	Number of chests
1913-14	2,01,38,000	9,151
1912-13	10,824	10,824
1911-12	21,162	21,162
"	6,71,48,206	"
"	5,09,56,940	"
"	6,71,48,206	"

**Malwa Opium**—The poppy from which Malwa opium is manufactured is grown chiefly in the Native States of Indore, Gwalior, Bhopal, Jabalpur, Dhar, Indur, Narsing and Kothar. The British Government has no concern with the cultivation of the poppy, or the manufacture of the opium but it used to regulate, before exports to China were stopped, under the system explained below, the import of Malwa opium into, and the transport through, its territories. As the chief market for Malwa opium was China, and as the States in which the drug is produced had no access to the sea, except through British territory, the British Government were able to impose a duty on the importation of the drug on its way to Bombay for exportation by sea. No statistics of cultivation or production are available. The poppy is sown in November, the plants flower in February, and by the end of March the whole of the opium has been collected by the cultivators who sell the raw opium to the village bankers. It is then bought up by the large dealers who make it up into balls of about twelve ounces and store it up until it is ready for export, usually in September or October. The opium is of 90¢ to 95¢ consistency and is packed in half chests and considerable dyage took place in the case of new opium while transported to Bombay.

To enable Malwa opium to reach Bombay a pass from the Opium Agent, or his Deputies, was required. This pass was not granted until the duty imposed by the Government of India had been paid. This duty was until 1912 at the rate of Rs 600 per chest but was raised to Rs 1,200 in that year consequent on the introduction of a system similar to that applied to Bengal opium. Under this system the Collector of Customs, Bombay, sold the right of exporting opium to the highest bidder at monthly auction sales. On payment of the price bid and of duty at the enhanced rate the bidder was given a certificate authorising him to import opium from Malwa. The number of chests fixed for export in the year 1913 was 8,660. But out of these only 2,755 were exported during the year owing to the large accumulation of stocks in China that country have ceased since January 1913 and the trade has become extinct since 17th December of that year when the last shipment was made. Practically the whole of the Malwa opium exported from Bombay went to China. There is no market for it in the Straits Settlements, a few chests annually are shipped to Zanzibar. The quantity and value of exports from Bombay in the last three years are as follows —

Quantity	Rs	Value
1913-14	2,755 chests	1,40,62,500
1912-13	11,203½	5,36,11,292
1911-12	14,039½	6,37,99,491

† Figures not available

Two descriptions of opium must be distinguished. **Raw opium** which is manufactured from poppy grown in the United Provinces, and **Altered opium** which is almost entirely produced in certain Native States in Central India and Rajputana.

**Bengal Opium**—Cultivation of poppy is only permitted under license. The cultivator to whom advances are made by Government free of interest is required to sell the whole of his production to the Opium Factory at Ghazipur at a rate fixed by Government. The area licensed for cultivation has in recent years been much reduced as a consequence of the agreement between the Government of India and the Chinese Government, and is now restricted to the United Provinces. The following are the figures of the area under cultivation and of production —

—	Number	Mounds of opium under cultivation	chests made
1911-12	200,672	31,473	23,126
1910-11	362,868	44,926	23,611
1909-10	354,577	67,666	36,172
1908-9	361,832	61,803	33,893
1907-8	488,548	71,340	51,230

At the Factory two classes of opium are manufactured

(1) "Provision" opium intended for export to foreign countries. This opium is made up in balls or cakes each weighing 3 lbs, 70 cakes weighing 140½ lbs being packed in a chest.

(2) "Excise" opium intended for consumption in British India. This is made up in cubic packets each weighing one seer, 60 packets being packed in one chest. It is of higher consistency than "provision" opium.

"Provision" opium is sold by public auction in Calcutta, the quantity to be sold being fixed by Government. This quantity has been reduced in recent years in accordance with the agreement with China, the figures being 15,440 chests in 1911 and 6,700 chests in 1912. Exports to China have been stopped altogether since 1913.

### Statistics of Trade

The difference between the cost of manufacture and the price realised at these sales may be regarded as the duty levied by Government —

—	Number of chests sold	Average price realised at auction sales per chest	Average cost of manufacture per chest
1911-12	26,330	2,790	525
1910-11	37,560	2,890	525
1909-10	43,300	1,612	515
1908-9	43,900	1,383	525
1907-8	48,900	1,350	503



**Indigenous methods**—Indians possess a large selection of excellent tanning materials such as *Acacia* pods and bark, Indian mullein, the Tamar's casia, Mangrove, and Myra-bolan. By these and such like materials and by various methods and contrivances, hides and skins are extensively cured and tanned and the leather worked up in response to an (I mean in India) leather

## WILD BIRDS' PLUMAGE

Legislation—Indian legislation on the subject will be studied with interest by those who have followed the course of legislation on this subject in other countries. Until 1887 no legislation was considered necessary in India. An Act of that year enabled local governments to make rules prohibiting under penalties the sale of skins and feathers of birds recently killed or taken during their breeding seasons, and the importation into any municipal or cantonment area of the plumage or any wild birds during those seasons, and local governments were empowered to apply these provisions to animals other than birds.

Afterwards, in 1902, action was taken under the Sea Customs Act to prohibit the exportation of the skins and feathers of birds, except feathers of ostriches and skins and feathers exported *bona fide* as specimens illustrative of natural history. Act VIII of 1912 goes much further than the previous law. It schedules a list of wild birds and animals to which the Act is to apply in the first instance, enables local governments to extend this list, empowers local governments to establish "close times," presumably during the breeding seasons, in the whole of their territories or in specified areas, for wild birds and animals to which the Act applies, and imposes penalties for the capture, sale, and purchase of birds and animals in contravention of the "close time" regulations, and for the sale, purchase and possession of plumage taken from birds during the close time. There is power to grant exemptions in the interests of scientific research, and there are savings for the capture or killing by any person of a wild animal in defence of himself or of any other person, and for the capture or killing of any wild bird or animal in *bona fide* defence or property.

The Bill for prohibiting the importation into England of wild birds' plumage, which was introduced in Parliament in 1913, was the occasion of a fierce controversy on the nature of the plumage traffic but organised opposition to the Bill failed to convince the public that the plumage trade was not one of great cruelty. Among well-authenticated cases from India that proved its cruelty was one from Karachi, in 1913, in which two men were hnd for sewing up the eyes of birds so that they should not flight in their cages. It was stated that this was a common practice of fishermen in Sind who breed birds and export their feathers to England. This according to *The Times*, is not only another apparent example of the way in which the prohibition on the export of plumage from India is notoriously evaded by smuggling into the open market of England, but shows how easily abuses might arise under any system which gave a general sanction to feather-farming. All legitimate methods of breeding birds for their plumage can be safeguarded as definite exceptions under an Act prohibiting importation, and only the exclusion by law of all plumage not so specified can put England abreast of the United States and of her own dangerous Dominion in the suppression of a barbarous industry.

**Plumage birds**—The birds most killed on account of their plumage in India are paddy birds, kingfishers, bustards, junglefowl, egrets, pheasants, partridges, peafowl, and hoopoes. Perhaps the most extensively killed in the past has been the Blue Jay (*Coracias Indica*). The smaller Egret is met with throughout India and Northern Burma. It is a pure white slim heron which develops during the breeding season a dorsal train of feathers, which elongates and becomes "decomposed," as it is expressed, that is to say, the bars are separate and distinct from each other, thus forming the ornamental plume or aigrette for which these birds are much sought after and ruthlessly destroyed. Thirty years ago the exports

## BREWERIES.

Statistics compiled from official returns show that there were, in 1912, 22 breweries in British India, of which one did not work during the year. Fifteen of these are private property and seven are owned by six joint-stock companies with a nominal capital of Rs 26,71,000, of which Rs 22,20,260 was paid up at the end of 1912-13. Eight of the breweries are located at stations in the Himalayas from Jhansi to Darjeeling. The largest brewery is the one at Lucknow, the Bangalore, Solan, Rawalpindi, Kasauli, Poona, and Mandla. Production was largest in 1902, since when it has tended to decline, while imports of foreign beer have increased proportionately except during the war. In the year 1907, the process was reversed and imports decreased.



In 1914 Indian breweries produced nearly 2½ million gallons against 3½ million gallons in 1913. Imports of spirit in 1914 amounted to 1,000,000 gallons against 1,200,000 in 1913. From the 1st January, 1908, the 1901/1907 amount of 2,673,616 gallons was reduced to 2,673,616 gallons less 1,000,000 gallons, i.e. 1,673,616 gallons. In 1914 Indian breweries produced nearly 2½ million gallons against 3½ million gallons in 1913. Imports of spirit in 1914 amounted to 1,000,000 gallons against 1,200,000 in 1913. From the 1st January, 1908, the 1901/1907 amount of 2,673,616 gallons was reduced to 2,673,616 gallons less 1,000,000 gallons, i.e. 1,673,616 gallons.

## GRAIN ELEVATORS.

The question of adopting elevators for the handling of Indian grain has engaged attention for some time and has assumed increased importance in the light of the railway congestion experienced in recent years and more particularly in the grain season. In the last three years great strides have been made by other countries in the adoption or perfecting of the elevator system, and a large mass of contemporary data on the subject has been brought together by the Commercial Intelligence Department. Since the subject is one that cannot receive adequate consideration in India until the facts are before the public, these have been embodied in a pamphlet entitled *Indian Wheat and Grain Elevators* by the late Mr. E. Noel-Paton, Director General of Commercial Intelligence to the Government of India. The production of what, and shows that less than one-eighth of the crop is exported. It describes the conditions under which the grain is held and the risks that it runs. It is pointed out that the miller for his no adequate means of preserving his wheat and that he is constrained to sell it at very early time also that the prices then obtained by him are considerably lower than those usually current in later months. The constant nature of the European demand is explained and an attempt is made to gauge the probability that the enormously increased quantities of wheat to be exported when new irrigation tracts come into bearing would be accepted by Europe at one time and at a good price, or could be economically transported under a system in which a few months of congestion alternated with a longer period of stagnation. Figures are given which suggest that in practice the effect of equipping railways to do this is to intensify the evil and so to ruin the structural nature of elevators and their functions are constituted in other countries. Particulars are given as to the laws that govern their operation in such countries.

## TRADE MARKS

The Indian Merchandise Marks Act (IV of 1889) was passed in 1889, but its operation in the earlier years was restricted, especially in Calcutta, in consequence of the lack of adequate facilities for the registration of marks.

Calcutta, in consequence of the lack of adequate goods machinery for the examination of In 1894, with the introduction of the present tariff, the Customs staff was strengthened for the examination of goods for assessment to duty, and this increase enabled examination to be made at the same time for the purposes of the Merchandise Marks Act The Act was intended originally to prevent the fraudulent sale of goods bearing false trade marks or false trade descriptions (as of origin, quality, weight or quantity). While the Act was before the Legislature a provision was added to require that all piece goods should be stamped with their length in yards In this respect these goods are an exception for the Act does not acquire that other descriptions of goods it would be stamped or marked, though it requires that when goods are marked the marks must be a correct description The number of deten-	(ending
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## INDIAN COMMERCIAL CONGRESS

A proposal was recently made by the Hon'ble Sir Fazlulhoy Chundabhai for the holding of periodical conferences of representatives of the several Chambers of Commerce in India. The suggestion was taken up by the Indian Merchants' Chamber and Bureau in Bombay and this body forwarded to the several Chambers of Commerce and Commercial Associations a Draft Constitution of the proposed Indian Commercial Congress. The objects of the Congress are stated as follows—(1) The Indian Commercial Congress is convened for the purpose of promoting by all legitimate and constitutional methods the best interests of trade, commerce and manufactures of the country and all cognate matters connected therewith. (2) For the fulfilment of the objects aforesaid, the Congress shall hold its session from time to time as occasion may demand, but at least once every three years, at such place and at such date as may be determined, discuss all mercantile and industrial affairs, prepare and submit in presentations thereon to the Provincial Governments, or the Government of India or the Secretary of State or the British Parliament or other authorities for the removal and prevention of injurious commercial measures and the introduction of others which may be calculated to promote the general commercial and other cognate interests of the country, and otherwise to take such action as may be conducive to the

## INVENTIONS AND DESIGNS.

The Inventions and Designs Act (No V) of 1888 was replaced by the Indian Patents and Designs Act (No II) of 1911, which came into force on the 1st January 1912. The object of the Act was to provide a simpler, more direct, and more effective procedure in regard to both to the grant of patent rights and to their subsequent existence and operation. The changes made in the law need not here be referred to in detail. They gave further protection both to the inventor, by providing that his application should be kept secret until acceptance, and to the public, by increasing the facilities for opposition at an effective period at the same time a Controller of Patents and Designs was established, with power to dispose of many matters previously referred to the Government-General in Council, and provision was made for the grant of a "patent" instead of for the mere recognition of an "exclusive privilege." The provisions of the Act follow with the necessary modifications those of the British Inventions and Designs Act of 1907.

The records of proceedings under the Act of 1888 show a steady, though not very rapid increase in recent years in the number of applications for leave to file specifications. The number of applications received increased from 521 in 1902 to 807 in 1911, and the number of specifications filed (i.e., of "exclusive privileges" required) from 375 to 603. The total number of applications under the Act up to the end of 1911 was 11,679, as the result of which 9,113 specifications were filed. The number of patents in force at the end of 1911 was 2,917. Only a small proportion of the

applications—some 60 or 70 a year—came during the decade from Indians. The majority came from persons not resident in India. The range of inventions for which protection was sought was very wide, inventions connected with railways, electrical contrivances, and chemical appliances and preparations being most numerous.

The latest statistics available for the year 1912 are as follows—

No of applications received for leave to file a specification 678  
 No of specifications filed, "patents sealed" 354  
 Subject of applications—  
 Bicycles and similar vehicles 35  
 Tea trade 11  
 Railways 67  
 Lamps and Burners 16  
 Electrical Contrivances 47  
 Spinning and Weaving Machines 20  
 Water-lifts and Pumps 15  
 Sugar cane and other Mills 5  
 Chemical Appliances and Preparations 104  
 Treatment of metals 20  
 Improvements in Building and Flying Machines 27  
 Others 280  
 Designs 343  
 No of applications for registration of copyright in designs 333  
 No of designs registered 4,801

accomplishment of the objects in view. The Congress is to consist of delegates from such Chambers, Associations etc., throughout India as may be recommended in that behalf by "the Congress" in open session, and these delegates shall elect a Committee or Management on which proportional representation (not yet specified) shall be assigned to principal committees and centres constituted. The President and Vice-President are to be appointed by a Special Committee appointed by the Congress in open session.

In November it was announced that the first meeting of the Commercial Congress would be held in Bombay on December 26. A circular summarizing the progress already made points out that while the original idea was to hold the Commercial Congress either annually or bi-annually, this has developed into a project to give the movement a more concrete, tangible and permanent form by the establishment of a Chamber which will be the chambers of commerce and commercial associations and will fully representative of their interests. Thus, all the leading commercial associations in Bombay were represented in the Reception Committee of the first Congress and they issued and circulated a draft constitution of the proposed Association. The session was held on December 26th and 27.



carries throughout all India from the Bengal  
 and railway mounds of 82-27 lbs to the Factory  
 mounds of 74 lbs 1002-11 lbs, the Bombay  
 mound of 28 lbs, which apparently answers  
 to the Royal Department mound in use at the  
 Fuel Deptt, and the Alders mound, which  
 some authorities estimate at 25 lbs and others  
 at 24 lbs and so on

**Committees of Inquiry**—These are merely typical instances which are multiplied indefinitely. There are variations of every detail of weights and measures in every part of India. The losses to trade arising from the confusion and the trouble which this state of things causes are heavy. Municipal and commercial bodies are not usually returning to the problem with a view to devising a practical scheme or reform. The Supreme and Provincial Governments have made various attempts during the last few years to solve the problem of universal units of weights and measures and commercial and municipal authorities have not been realising the importance, but the expectation has not been gradually followed by trade throughout the empire, and the expectation has not been realised.

The Government of India considered the whole question in consultation with the provincial governments in 1890-1891 and various special steps have at different times been taken in different parts of India. The Government of Bombay appointed a committee in 1911 to make proposals for reform for the Bombay Presidency. Their final report has not been published, but they presented in 1912 an *ad interim* report which has been issued for public discussion. In brief, it points out the practical impossibility of proceeding by compulsory measures affecting the whole of India. The Committee stated that over the greater part of the Bombay Presidency a standard of weights and measures would be heartily welcome by the people. They thought that legislation compulsorily applied over large areas subject to many diverse conditions of trade and social life would not result in bringing about the desired reform so successfully as a "lead" supplied by local legislation based on practical experience. They want of coherence, *unevenness*, or the means of co-operation among the people at large pointed to this conclusion. The Committee pointed out that a good example of the results that will follow a good lead is apparent in the East Indian District of the Presidency, where, the District Officer, Mr. Simcox, gradually, during the course of three years, induced the people to adopt throughout the district uniform weights and measures, the unit of weight in this case being a coin of 180 grains. But the committee abstained from recommending that the same weights and measures should be adopted over the whole Presidency, pre-fering that a new system started in any area should be as nearly as possible similar to the best system already prevailing there.

Measures Association and the Deccan Association, respectively, at different times that British weights and measures and the decimal system should be introduced. Both proposals fail to meet the special requirements set forth by the Bombay Committee. Variations of them which have been put forward by different bodies in India in recent years are that the English pound weight and the English hundred weight should be adopted as the unit of weight for all India. The argument in favour of the importation of an outside unit in this manner is that people in India will always associate with a given, familiar denomination of weight or measure the value they have been accustomed to consider in regard to it, but that a new weight were introduced they would learn to use it in dealing with their neighbours, without the interference of anything resembling prejudice at what they might regard as an attempt to tamper with their old, traditional standards of dealing.

This committee reported, in August 1912, in favour of a uniform system of weights to be adopted in India based on the 180 grain tola. The report says—Of all such systems there is no doubt that the most widespread and best known is that known as the Bengali or Indian Kailash weights. The introduction of this system involves a more or less considerable change of system in parts of the United Provinces (Gorakhpur, Bareilly and neighbouring areas), practically the whole of Madras, parts of the Punjab (rural portions of Amritsar and neighbouring districts), of Bombay (South Bombay, Bombay city and Gujarat), and the North West Frontier Province. Burma has at present a separate system of its own which the committee think it should be permitted to retain. The systems recommended are —

	FOR INDIA	TOR BURMA
8 khashinas	= 1 channal	= 1 large wve
8 chawwas	= 1 ratbi	= 1 po
8 rattis	= 1 masra	= 1 mu
12 mashes or 4 tyaks	= 1 tola	= 1 mt
6 tolas	= 1 bhatal	= 1 ngunnu
16 chrakhs	= 1 seer	= 1 tikai
40 seers	= 1 maund	= 1 pektika or vis
5 small yves		
4 large yves		
2 ps		
5 pes or 2½ mus		
1 mt		
2 ngunus		
100 tikais		

The tola is the tola of 180 grains, equal to the rupee weight. This vis has recently been fixed at 3·60 lbs or 1·6 tolas.

The recommendations of the Commission must will generally approved and have been referred to the Provisional Government for their consideration.



FACTORIES INSPECTED UNDER THE FACTORY ACT.

Province	Number of Factories and works to be inspected	Average of Number of Hands employed daily	Number of Persons convicted for breach of Act	Number of Accidents Reported			
				Fatal	Serious	Minor	Total
Bengal	322	320,087	7	64	612	547	1,113
Bihar and Orissa	26	23,722	1	1	38	83	122
United Provinces	201	54,803	14	9	108	173	290
Punjab	208	32,865	4	7	61	196	264
North-West Frontier Province	4	241	1	13	150	186	349
Burma	438	50,723	1	5	37	130	172
Central Provinces and Berar	268	65,191	3	2	15	449	466
Madras	687	259,845	16	30	85	1,476	1,591
Bombay	16	2,901	.	2	2	2	4
Assam	9	11,996	1	11	125	187	187
Ajmer-Merwara	2,654	869,643	104	122	1019	3,367	4,508
<b>Total in 1912</b>							



cars

Mach is

Companies have been arranged according to the date of establishment

Life Insurance

			Bombay	Bangal	Punjab	United Province, Assam, Aher-Merwar
1820	Madras Insurable (excepted under Section 41 of Madras Widows					
1833						
1847						
1840	Times City C M S Widows Fund					
1871						
1874			Bombay Mutual Oriental			
1870			Bombay Widows			
1885			Goanese Mutual			
1886						
1887						
1888	Vangalore Roman Catholic					
1889			B B & C I Zoroastrian			
1890			Bombay Zoroastrian			
1891						
1892			Gujarat Zoroastrian			
1893			Indian Life			
1894				Hindu Provident Fund		
1895						
						Indian Empire Branch of Reinsurances (United)





## Chambers of Commerce.

Modern commerce in India was built up by merchants from the west and was for a long time entirely in their hands. Chambers of Commerce and numerous kindred associations were formed by them for its protection and assistance. But Indians have in recent years, taken a large and growing part in this commercial life. The extent of their participation varies greatly in different parts of India, according to the natural privileges and genius of different races. Bombay, for instance, has led the way in the industrial and commercial regeneration of the new India, while Bengal, very active in other fields of activity, lags behind in this one. Arising from these circumstances we find Chambers of Commerce in Bombay, Karachi, Calcutta, Madras and other important centres, with a membership both European and Indian, but alongside these have sprung up in recent years certain associations, such as the Bombay Indian Merchants' Chamber and Bureau, of which the membership is exclusively Indian. These different classes of bodies are in no sense hostile to one another and constantly work in association.

The London Chamber of Commerce in 1912, realising the increasing attention demanded by the economic development of India, took steps to form an "East India Section," of their organization. The Indian Chambers work harmoniously with this body, but are in no sense affiliated to it, nor is there at present any inclination on their part to enter into such close relationship, because it is generally felt that the Indian Chambers can themselves achieve their objects better and more effectively than a London body could do for them, and on various occasions the London Chamber, or the East India Section of it have shown themselves out of touch with what seemed locally to be immediate requirements in particular matters.

A new movement was started in 1913 by the Hon. Sir Fazlulhoj Currimbhoy Ibrahim, a leading millowner and public citizen of Bombay, which promises to lead to great improvement in strengthening Indian commercial organization. Sir Fazlulhoj's original plan was for the formation of an Indian Commercial Congress. The proposal met with approval in all parts of India. The scheme was delayed by the outbreak of war but was carried further last year when it was decided to call a first session of the Congress for the 1915 Christmas holiday season, in Bombay. The list of members of the Reception Committee showed that all the important commercial associations of Bombay were prepared to co-operate actively and it was announced that the Congress would have presented to it a scheme for an associated Chamber of Commerce for the whole of India—a Chamber of Indian Chambers of Commerce. The Commercial Congress will be, then, a sort of annual meeting of this Chamber, dealing with all the commercial problems from the general point of view. Different Chambers will be entitled to bring forward their local questions and the Associated Chamber will consider them, provided members representing other Chambers approve of them." The following are the principal paragraphs of a Memorandum of Association of the Associated Indian Chamber of Commerce which was prepared for submission to the Congress—

- I. The name of the Chamber will be, "THE ASSOCIATED INDIAN CHAMBER OF COMMERCE." II. The Registered Office of the Chamber will be in Bombay.
- III. The objects for which the Chamber is established are—
  - (a) To discuss and consider questions concerning and affecting trade, commerce, manufactures, and the shipping interests, at meetings of delegates from Indian Chambers of Commerce and Commercial Associations or Bodies and to collect and disseminate information from time to time on matters affecting the common interests of such Chambers and associations or Bodies and the commercial, manufacturing and shipping interests of the country.
  - (b) To communicate the opinions of the (Chambers of Commerce and other Commercial Associations or Bodies separately or unitedly, to the Government or to the various departments thereof, by letter, memorial, deputations or otherwise.
  - (c) To petition Parliament or the Government of India or any Local Government or authority on any matter affecting trade, commerce, manufacture or shipping.
  - (d) To prepare and promote in Parliament or in the Legislative Councils of India, both Imperial and Provincial, Bills in the interest of trade, commerce, manufactures, and shipping of the country and to oppose measures which, in the opinion of the Chamber, are likely to be injurious to those interests.
  - (e) To attain those advantages by united action which each Chamber or Association or body may not be able to accomplish in its separate capacity.
  - (f) To have power to establish an office either in England or in any part of British India with an Agent there, in order to ensure to the various Chambers early and reliable information on matters affecting their interests and to facilitate communication between the Chamber or individual chambers and the Government or other public bodies, and generally to conduct and carry on the affairs of the Chamber.
  - (g) To organize Chambers of Commerce, Commercial Associations or Bodies in different trade centres of the Country.
  - (h) To convene when necessary the Indian Commercial Congress at such places and at such times as may be determined by a Resolution of the Chamber.
  - (i) To do all such other things as may be incidental or conducive to the above objects.

The draft Articles of Association provide for the management of the Chamber by an Executive Council composed of a President, Vice-President, and ten other members elected at the annual meeting of the Associated Chamber, the Executive Council to present a report and

The Articles declare the number or members of the Association (whether not to exceed one hundred and the Executive Council are given power to elect honorary members. There shall be an annual meeting of the Association (which may be held at Bombay on a date to be fixed by the Executive Council) in the month of February," or at some other time, and "seminar, annual or special meetings may be convened by the Executive Council or on the acquisition of one third of the total number of members addressed to the Secretary.) The following are details of the principal Chambers of Commerce and kindred bodies in India at the present time —

## BENGAL

The Bengal Chamber of Commerce was founded in 1834. Its head quarters are in Calcutta. Other societies connected with the trade and commerce of the city are the Royal Exchange, the Bengal Bonded Warehouse Association, the Calcutta Trade Association and the Bengal National Chamber of Commerce. The Bengal Chamber is a registered declaration of membership of 200. Its objects are the usual purposes connected with the protection of trade "in particular in Calcutta." There are two classes of members, Permanent and Honorary.

Members, bankers, shipowners, representatives of commercial, railway and insurance companies, brokers, persons and firms engaged in commerce, agriculture, mining or manufacturing, and joint stock companies or other corporations formed for any purpose or object connected with commerce, agriculture, mining or manufacturing, and persons engaged in or connected with art, science or literature, may be elected as permanent members of the Chamber.

A candidate for election as a permanent member whether an individual, a firm or a joint stock company or other corporation, must be proposed by one and seconded by another permanent member, and may be elected provisionally by the Committee, but that election is subject to confirmation at the next annual general meeting. The subscription to the funds of the Chamber of permanent members residing or carrying on business in Calcutta is Rs 25 per annum, and that of permanent members residing or carrying on business elsewhere than in Calcutta is Rs 32 per annum. No entrance fee is charged. Honorary members are not required to subscribe to the funds of the Chamber. Officials and others indirectly connected with the trade, commerce or manufactures of Bengal, or who may have rendered distinguished service to the interests represented by the Chamber, may be elected honorary members by the Committee upon the proposal of any two permanent members. Whether members of the Committee may be admitted by the Committee as honorary members for a period not exceeding two months on the proposal of any permanent member or whether a member of the Committee or not Honorary members are entitled to receive the last published report of the Committee, to attend and speak but not to vote at any general meeting held during their membership, and may upon the invitation of the President, Vice-President or Chairman, as the case may be, attend under the like conditions any meeting of Committee or of any departmental committee or sub-committee.

The affairs of the Chamber are conducted by the following officers, namely, a President, Vice-President seven ordinary members of Committee, a Secretary and two Assistant Secretaries, a Secretary and two Assistant Secretaries.

*President*—Hon. Mr. F. H. Stewart, C.I.E. (Glasgow, Wylie & Co.)  
*Vice President*—Hon. Mr. E. H. Bray (Gillanders, Arbuthnot & Co.)  
*Committee*—Messrs. A. Vasto (Ralli Bros.), W. E. Crum (Graham & Co.), H. Harris (Chartered Bank of India, Australia and China), D. Carmichael (Jackson, Mackenzie & Co.), W. Ross Smith (Bird & Co.), E. A. S. Bell (Eastern Bengal State Railway) and H. V. Mansell (Jas Finlay & Co., Ltd.)  
 The Secretary of the Chamber is Mr. H. M. Haywood, Assistant Secys.—Mr. D. R. Cumison and Mr. A. C. Daniel.  
 The following are the public bodies to which the Chamber has the right of returning representatives, and the representatives returned for the current year —  
*Viceroy's Legislative Council*—The Hon. Mr. F. H. Stewart, C.I.E.  
*Bengal Legislative Council*—The Vice-President of the Chamber and the Hon. Mr. Archy Burmyre.  
*Calcutta Port Commission*—Messrs. A. Vasto (Ralli Bros.), W. E. Crum (Graham & Co.), D. Carmichael (Jackson, Mackenzie & Co.), A. G. Patterson (Becker, Gray & Co.), S. Eustace (Kilburn & Co.), Wylie & Co.)  
*Calcutta Municipal Corporation*—Messrs. A. C. Patterson (Becker, Gray & Co.), T. R. Pratt, W. R. Rae (Sun Insurance Office), and Shirley Tremaigne (W. H. H. Targett & Co.)  
*Bengal Boiler Commission*—Messrs. G. L. Thomson (Barnagore Jute Factory Co., Ltd.), G. F. Scott (Bengal Coal Co., Ltd.) and T. W. Wilson (Jessop & Co., Ltd.)  
*Board of Trustees of the Indian Museum*—Mr. J. B. Lloyd (Shaw, Wallace & Co.), Bengal Snake Bites Commission—Messrs. John Taylor (Burn & Co., Ltd.) and W. Lamond (Union Jute Co., Ltd.)  
*Calcutta Improvement Trust*—Mr. W. R. Dods (Agent, Hongkong and Shanghai Banking Corporation)  
 The Chamber elects representatives to various other bodies of less importance, such as the committee of the Calcutta Sailors' Home, and to numerous subsidiary associations. The following are the recognised associations of the Bengal Chamber of Commerce —

Calcutta Wheat and Seed Trade Association, Indian Tea Mills' Association, Indian Tea Association, Calcutta Tea Traders' Association, Calcutta Fire Insurance Agents' Association, Calcutta Export Trade Association, Calcutta Marine Insurance Agents' Association, The Wine, Spirit and Beer Association of India, Indian Mining Association, Calcutta Baled Jute Association, Indian Paper Makers' Association, Indian Engineering Association, Jute Traders Shippers' Association, Calcutta Dy-  
nammic Press Association, Jute Fabric Brokers' Association, Baled Jute Shippers' Association  
The Chamber maintains a tribunal of arbitration for the determination, settlement and adjustment of disputes and differences relating to trade, business, manufactures, and to customs of trade, between parties, all or any of whom reside or carry on business personally or by agent or otherwise in Calcutta, or elsewhere in India or Burma, by whomsoever of such parties the said disputes and differences be submitted. The Secretary of the Chamber acts as the Registrar of the Tribunal, which

**BOMBAY**

The object and duties of the Bombay Cham-

and protect the general mercantile interests of this Presidency, to collect and classify information on all matters for removal, as far as such a Society can, of all acknowledged grievances affecting merchants as a body, to rovide general information on matters of usage and custom in mercantile transactions, and by this and such other means, as the Committee for the time being may think fit, assisting to form a code of practice for generalizing and facilitating business, to communicate with the public authorities, with similar Associations in other places and with individuals, on subjects of general mercantile interests, and to arbitrate between parties claiming to refer to, and abide by, the judgment of the Chamber.

The Bombay Chamber was established in 1886, under the auspices of Sir Robert Grant, who was then Governor of the Presidency, and the programme described above was embodied in their first set of rules. There are now affiliated with the Chamber the Bombay Mill-owners' Association, which exists to carry out the same general objects as the Chamber in the special interests of millowners and users of cotton and water power, and the Bombay Exporters' Association, which similarly exists for the special benefit of persons engaged in export trade.

in the cotton trade returns, the number of members of the Chamber is 122. Of these 16 represent banking institutions, 7 shipping agencies and companies, 3 firms of solicitors, 6 insurance companies, 12 firms engaged in general mercantile business.



# **Bombay Millowners' Association.**

The Bombay Millowners' Association was established in 1875 and its objects are as follows—

- (a) The protection of the interests of millowners and users of steam water and/or electric power in India.
- (b) The promotion of good relations between the persons and bodies using such power.
- (c) The doing of all those acts and things by which these objects may be furthered.

Any individual partnership or company, owning one or more mill or one or more presses, one or more ginning or other factory or factories actuated by steam, water, electric or other power is eligible for membership, members being elected by ballot. Every member is entitled to one vote for each mill which is—

- (a) owned by such member,
- (b) subscribed for according to the rules of the Association by such member,
- (c) worked by motive power separate and distinct from the motive power by which any other mill is worked.

If two or more mills are owned by any one member but are worked by one motive power, the member in question shall be entitled to one vote only in respect of the two mills.

The membership of the Association in 1915 numbered 82.

The following is the Committee for 1915—

Mr Jehangir B Petit, (Chairman), Mr N B Saklatwala, (Deputy Chairman), Sir Dunsnavw M. Petit, Bart, The Hon'ble Sir Fazlunow Currimbhoy, Kt, Sir Vithaldas D Thackersey, Kt, Mr I R Alder, the Hon'ble Mr Munimchodas Ramji, Mr J E Bradbury, Mr B Brown, Mr Rahimtoola Currimbhoy Ebrahim, Mr Narotam J Goculdas, Mr N G Hunt, Mr Govasjee Jhangir (Jm), Mr I H. Latimer Mr C V Mehta, Mr Moyer Nissim Mr Dinshaw E Wadia, Mr C N Wadia, Mr N N Wadia

Mr R. E Gregor-Pearse, Secretary  
Mr Noel-Wilkinson, B A, Asst. Secy.  
The following are the Association's Representatives on public bodies—  
City of Bombay Improvement Trust, Sir Sassoon David, Bart  
Victoria Jubilee Technical Institute, Mr Jehangir Bomanjee Petit  
Bombay Smoke Nuisances Commission, Messrs J E Bradbury & W A Sutherland  
Advisory Board of Sudeham College of Commerce and Economics, Mr N N Wadia

# **Indian Merchants' Chamber.**

The Bombay Indian Merchants' Chamber and Bureau was established in 1907 with the following objects—“To encourage a friendly feeling and unanimity among commercial men

on all subjects involving their common good, to promote and protect the trade, commerce and manufactures of India and in particular of the Presidency of Bombay, to consider and deliberate on all questions affecting the rights of Indian Merchants, to represent to the Government their grievances, if any, and to obtain by constitutional methods the removal of such grievances, to collect and compile and distribute in such manner as may be most expedient for purposes of disseminating commercial and economic knowledge, all statistics and other information relating to trade, commerce and finance, specially Indian as well as to form and maintain a library, and generally to do all such matters as may promote the above objects in view, to arbitrate between parties willing to refer to and abide by the judgment of the Chamber, to receive and decide references of matters of usage and custom in dispute, recording such decisions for future guidance and assisting by this and such other means, as the committee for the time being may think fit, to form a code of practice so as to simplify and facilitate the transaction of business.”

The Chamber has not yet taken up the work of arbitration, measurements, etc

The following bodies are connected directly and indirectly with the Chamber, though no public body is directly affiliated to it—

The Bombay Native Piece goods Merchants' Association (which sends a large number of representatives),

The Grain Merchants' Association which is a member,

The Hindustani Native Merchants' Association (which is a member),

The Bombay Commission Agents' Association, The Bombay Native Piece goods Merchants' Association jointly with the Bombay Native Piece goods Merchants' Association and a representative to the Board of Trustees for the Port of Bombay, whenever it is so notified by the Government (vide Act No 1 of 1909) The Chamber also has the right to elect a representative on the Board of the Sudeham College of Commerce and Economics, Bombay

Any person engaged in mercantile pursuits or interested in trade and commerce desirous of joining the Chamber is eligible for membership, there being two classes of members, viz, Ordinary and Honorary

Ordinary members who pay Rs 30 annual fee and (2) Assistant members who pay Rs 5 as annual fee

An ordinary member also pays an entrance fee of Rs 50 on being elected

Gentlemen distinguished for public services or eminent in commerce and manufactures or otherwise interested in the aims and objects of the Chamber may be elected as Honorary members by a General Meeting of the Chamber on the recommendation of the Committee and as such are exempted from paying subscriptions They are not entitled to vote at any meeting of the Chamber nor are they eligible to serve on the Committee They are, however, supplied with all the publications of the Chamber free of charge

[illegible][illegible]

**Native Piece-Goods Association**

The objects of the Association are to follow —

[illegible]

The following are the office-bearers for the current year —

C/airman—The Hon Mr Manmohandas

Deputy Chairman—Mr. Gopalji Vaji Sunddaji  
 Joint Secretaries—Messrs. Purbhokan  
 and Vilaldas D. Modat (Gondal)

Non Treasurer—Mr Mathuradas Haridas

**Grain Merchants' Association.**

The objects of the society are to promote the interests of the mercantile community in the city and to spread and improve the body of large membership. It is the office holders for the current year are as follows—

Chattman—Mr. Hirtz Muller, & Messrs. Phelan, Zampi & Co

Vice Chairman—Mr. Veil, Lakeland, B. A.

Don Secretary—Mr Shanji Shetye  
Secretary—Mr Lalshanker Harprasad

## KARACHI

bers. All new members joining the Chamber pay Rs 100 entrance fee and the monthly subscription is Rs 6 for any member contributing Rs 600 to the Chamber Fund, in addition to entrance fee, and Rs 12 without such contribution. The subscription for the Chamber's periodical returns is Rs 5 per month. The affairs

The object - and duties of the Karachi Chamber are set forth in terms similar to those of Bombay (Gujarat) for membership are also similar. Honorary membership is conferred upon any gentleman interested in the affairs and objects of the Chamber, subject to election by the majority of the votes of members.

Cotton Trade Association

It is a monthly journal, publishing information on commercial and industrial subjects and publishing all state and consolidated important relating to the trade and commerce of India.

[illegible]

- Printed by J. B. Nichols & Co.

THE UNIVERSITY OF CHICAGO

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for the purpose of the present study, the following

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1. The first part of the document is a list of names and titles, including "The Hon. Mr. Justice" and "The Hon. Mr. Justice".

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1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.

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THESE THINGS ARE ALL PART OF THE SAME WHOLE, AND WE MUST NOT FORGET THAT THE WHOLE IS GREATER THAN THE PARTS.

[illegible]

Hence  $\lim_{n \rightarrow \infty} p_n = 0$ . It follows from (1) that

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THE UNIVERSITY OF CHICAGO

Tolson \_\_\_\_\_

of the Chamber are managed by a committee of ten members, consisting of a Chairman, Vice-Chairman and eight members, elected at the annual meeting of the Chamber in January or immediately after the Chamber elects a representative on the Bombay Legislative Council and three representatives on the Karachi Port Trust. There were last year 54 members of the Chamber, and 7 Honorary Members.

The following are the officers of the Chamber for the current year —

President—Mr. J. H. Rogers  
Secretary—Mr. J. H. Rogers  
Treasurer—Captain S. M. J. J. J.  
Representative on the Karachi Port Trust—The Hon. Mr. de P. Webb, C.P., Mr. James Keyson, Mr. J. H. J. J.  
Representative on the Karachi Port Trust—The Hon. Mr. de P. Webb, C.P., Mr. James Keyson, Mr. J. H. J. J.

*Charmant—The Hon. Mr. de la Roche, Sir E. Forbes, Campbell & Co)*  
*The Chairman—J. Murray (Esq., Kt. Sir E. Forbes, Campbell & Co)*

*Mining Committee*—Messrs H G Poughon (Donald Graham & Co.), J Lenz (Volkmann Brothers), J N Metcalf (Raffell Bros), W F Nicholas (Anderson & Co.), H H Sawyer (David Sassoon & Co.), S J Stephen (National Bank of India Ltd), D B Trevor (N-W Railway), and S C Woodward (Clements, Robson & Co.)

**MAD**

take to nominate European surveyors for the settlements of disputes," as to the quality or condition of merchandise as to the quality in which both parties desire the Chamber to do so." When two members of the Chamber or when one member and a party who is not a member have agreed to refer disputes to the arbitration of the Chamber or of an arbitrator or arbitrators nominated by the Chamber, the Committee will undertake to nominate an arbitrator or arbitrators, under certain regulations. A public measurer is appointed under the authority of the Chamber to measure pressed bales of cotton, wool, hemp, hides and other merchandise in Karachi.

Chairman—Mr Gordon Fraser  
Vice Chairman—The Hon Sir Hugh Fraser  
Committee—Messrs J C Armstrong, R Greenall, W D Hunter, and G B Simpson, R D  
Secretary—Mr A E Lawson, G I D

The following are bodies to which the Chamber are entitled to elect representatives, and the representatives elected last year —

Madras Legislative Council—The Hon'ble Sir Hugh Fraser  
Madras Port Trust—The Hon. Sir Hugh Fraser, Messrs C B Simpson (Brimley & Co Ltd), Gordon Fraser (Best & Co, Ltd), H (Greenhill), M & S M Railway, and J H Thompson (Madras Trades Association)  
Madras Municipal Corporation—Messrs T W Crushee (Wallson & Co), A J Leach (P. A. Taylor & Co) and J R Simpson (Gordon, Woodroffe & Co)  
British Imperial Council of Commerce, London—Sir A J Toke (in Europe)  
Indian Tea Cases Committee—Sir J C Armit

strong (Perry & Co )



To maintain a library of books and publications of commercial interest, so as to diffuse commercial information and knowledge amongst its members.

"To establish Museums of commercial products or organic exhibitions, either on behalf of the Chamber or in co-operation with others."

There are two classes of members, permanent and honorary. The usual conditions as to eligibility for election prevail.

The "Election Committee" Association is affiliated to the Chamber. The right of electing two representatives to the Madras Port Trust is a

**Honorary Secretaries**—Mr R. R. P. N. Muthusami Naidu Garu, B. A., and Moulana Abdus Subhan Sahib

**Asst Secretary**—C. Duraiswami Aiyangar.

## UPPER INDIA CHAMBER.

The Upper India Chamber of Commerce is concerned with trade, commerce and manufactures in the United Provinces and has its registered office at Kanpur. Members are elected by the Committee, subject to confirmation by the next general meeting of the Chamber. Honorary members are elected on the usual qualification, but can neither serve in the Committee nor vote at meetings of the Chamber. There is no entrance fee for membership, but subscriptions are payable as follows—A firm or association having its place of business in Kanpur, Rs. 200 a year, an individual member resident or carrying on business in Kanpur, Rs. 100 a year, or individuals having their places of business or residences outside Kanpur pay half the above rates, but the maintenance of a branch office in Kanpur necessitates payment of full rates.

The affairs and funds of the Chamber are managed by a Committee of ten members, which has power to constitute Local Committees, of from four to seven members each, at trade centres where membership is sufficiently numerous to justify the step. Such Local Committees are elected on the usual basis.

The following are the officers—

**President**—The Hon. Mr. L. P. Wilson (Cooper, Allen & Co., Ltd.)

**Vice-President**—Mr. B. B. Briscoe (Ligum Mills Co., Ltd.)

**Members**—Messrs. H. M. Halford (Allahabad Bank, Ltd.), N. A. S. Bond (E. I. R.), C. O. Malley (Kanpur Cotton Mill), W. D. Edleston (Bazell, Subbaram & Co.), T. Garin Jones (Empire Engineering Co.), A. W. Milley (Kanpur Woolen Mills), T. Smith (Nair Mills Co.), Babu Ram Narain (Ram Narain Buidladas).

**Secretary**—Mr. J. G. Ryan

## PUNJAB

The Punjab Chamber of Commerce has its headquarters at Delhi and exists for the care of mercantile interests on the usual lines in the Punjab, the North-West Frontier Province and Kashmir. There are affiliated branches of the Chamber at Lahore, Amritsar and Rawalpindi. Members are elected by ballot, the only necessary qualification being interest in mercantile pursuits. There is no entrance fee. The rate of subscription is Rs. 10 per month. The following are the Officers, Committee and Representatives on public bodies for the current year—

**President**—Mr. F. C. Waller (Messrs. F. C. Waller & Co.)

**Members**—Mr. C. H. Bickley Hoe (The Punjab Banking Co., Ltd.), Mr. J. G. Roberts (Guthrie & Co.), Mr. N. A. S. Bond (East Indian Railway), The Hon. Mr. James Currie (Messrs. James Currie & Co.), Mr. A. F. Gordon (National Bank of India, Ltd.), Mr. D. N. Bhanja (Kerr, Parnock & Co.)

**Representative on Punjab Legislative Council**—The Hon. Mr. James Currie

**Secretary**—Mr. J. Hinton Dunning, F.R.S.A.

## UNITED PROVINCES.

A meeting of Indians engaged or interested in the trade and industry of the United Provinces was held at Kanpur in February, 1914, to inaugurate an Indian Chamber of Commerce for the United Provinces. Representatives of firms in Kanpur, Benares, Allahabad, Lucknow, Fyzabad and other

The following are the office-holders of the Chamber, appointed in 1915 —

**President**—Raj Bahadur Lal Prayag Narain  
Bharava (U I Couper Paper Mills, Lucknow)  
**Vice-Presidents**—The Hon Lal Bahadur Narain  
Nath, Huz Mahomed Halim and Lal Moholchand

## BURMA.

**Committee**—Mr Madan Mohan Khanna  
(Allahabad Bank), C Y Chintamani  
(Newspapers, Ltd, Allahabad) Mr Akshat  
(Oudh Commercial Bank, Ltd, Fyzabad),  
Babu Bahari Lal (Sri Ganga Cotton Mills,  
Lucknow), Messrs. Dinanath, Minna Lal  
Dehari Lal, Raj Bahadur Kamhiya Lal and  
Seth Ram Gopal, Cawnpore  
**Secretary and Joint Secretary**—B Vikramjit  
Singh and Pandit Bishwa Nath Tholal

and others indirectly connected with the trade of the province, or who may have rendered distinguished service to the interests represented by the Chamber, may be elected by the Committee, either on their own motion or on the suggestion of two Members as Honorary Members of the Chamber. Honorary Members are not required to subscribe to the funds of the Chamber.

The Chamber undertakes arbitrations in addition to its ordinary work. It does not publish any statistical returns.

The following are the Officers, Committee and Representatives on public bodies for the current year —

**Chairman**—The Hon Mr A W Blinning  
(Binning & Co)  
**Vice-Chairman**—Mr E O Anderson  
(Bullock Bros & Co, Ltd)  
**Committee**—Mr W Buchanan (Finlay, Fleming & Co), Messrs B E G Ladd, (Gladders, Arbuthnot & Co), C Guinness (Hongkong and Shanghai Banking Corp, Ltd), E J Holberson (Bombay-Burma Trading Corp, Ltd), H B Hindlestone, (Burma Railways), Mr Joakim (Balthazar & Son), J A Polson (Irrawaddy Flotilla Co, Ltd) and J Scott (Steel Brothers & Co, Ltd)

**Secretary**—Mr C A Cutbiss  
**Representative on the Burma Legislature Council**—The Hon Mr A W Blinning  
**Representatives on the Rangoon Port Trust Board**—Messrs D Robertson, W Buchanan, J A Polson, J Scott  
**Representative on the Rangoon Municipal Committee**—Mr M Joakim

## COCANADA.

The following are the office-holders of the Cocanada Chamber of Commerce, which has its headquarters at Cocanada, the chief port on the Coromandel Coast, north of Madras —

**Chairman**, A Gardiner and B Riddington  
(Command Co, Ltd), E H D'Crux  
(Wilson & Co), A E Todd (Simson Bros), Mr B R Rao Bahadur K Suryanarayana Murthy, Naidu Gannu and G M Lake (Innes & Co), W Mac-Kintosh (Shaw Wallace & Co), H J Hunter (Ripley & Co) and E. Hurry  
**Secretary**—Mr J A Muller

The rules of the Chamber provide "that by the term 'member' be understood a mercantile firm or establishment, or the permanent agency of a mercantile firm or establishment, and duly electing according to the rules of the Chamber, and that all such be eligible, but only members resident in Cocanada can hold office."

Members are elected by ballot. The Committee, when called upon by disputing members or non-members of the Chamber, give their decision upon all questions of mercantile usage and arbitrate upon any commercial matter referred to them for final judgment. In the former case a fee of Rs 16 and in the latter a fee of Rs 32 must accompany the reference.

The Committee consists of 4 members, including the Chairman, and 2 supplementary members.

The Chamber elects representatives to the following Public Bodies —

Burma Legislative Council,  
Rangoon Port Trust Board,  
Rangoon Municipal Committee,  
Victoria Memorial Park Trustees,  
Pastor Institute Committee  
Burma Boiler Commission

All corporations, companies, firms or persons engaged or interested in mercantile pursuits, such as merchants, bankers, shipowners and brokers or who are connected with agriculture, mining, manufactures, insurance, railways, commerce, art, science or literature shall be eligible to become Members of the Chamber.

The subscription is Rs 20 per month. Officials

vers, the Chairman to be elected by ballot at the general meeting of January in each year, for a term of 12 months, and the Committee, with 2 supplementary members, at the general meetings of January and July in each year for the term of 6 months. The entrance fee for each member whose place of business is in Ceylon is Rs 50 and for each member whose place of business is elsewhere be Rs 25. A weekly slip of current rates of produce, freights, and exchange is drawn up by the Committee.

## CEYLON.

The Ceylon Chamber of Commerce was incorporated in 1895 and has its head-quarters at Colombo. All firms and persons engaged in the general trade of Ceylon are admissible as members and every person or firm desirous of joining the Chamber must be proposed by one member, seconded by another and balloted for by the whole Chamber. The affairs of the Chamber are conducted by a Board of Directors consisting of Chairman and Vice-Chairman and from five to 10 members.

The following is the membership of this Committee at the present time —

Mr Wm. Moir (Lewis Brown & Co) (*Chairman*), Mr Jas Lochore (*Vice-Chairman*), Mr R. S. Philpott (P & O S N Co), Mr H. S. Jefferies, Mr W. G. Macvicar (Chartered Bank), Mr W. Phillips, Mr T. S. Clark, Mr W. Fraser, Mr C. S. Burns, Mr M. J. Cary

*Secretary*—Mr F. M. Simpson

## \* The Peoples of India

It is essential to bear in mind, when dealing with the people of India, that it is a constituent rather than a country. Nowhere is the complex character of Indians more clearly exemplified than in the physical type of its inhabitants. No one would confuse the main types, such as Gurbhas, Pathans, Sikhs, Rajputs, Burmans, Nagas, Tamils, etc., nor does it take long to carry the differentiation much farther. The typical inhabitants of India—the Dravidians—differ altogether from those of Northern Asia, and more nearly resemble the tribes of Malaya, Sumatra and Madagascar. Whatever may be their origin, it is certain that they have settled in the country for countless ages and that their present physical characteristics have been evolved locally. They have been displaced in the North-West by successive hordes of invaders, including Aryans, Scythians, Pathans and Moghals, and in the North-East by Mongoloid tribes allied to those of Burma, which is India only in a modern political sense. Between these foreign elements and the pure Dravidians is borderland where the contiguous races have intermingled.

The people of the Indian Empire are divided by Sir Henry Risley (Caste, Tribe and Race, Indian Census Report, 1901, the Gazetteer of India, Ethnology and Caste, Volume I, Chapter 5) into seven main physical types. There would be eight if the Andamanese were included, but this tiny group of Negrits may be disregarded. The Turko-Iranian, represented by the Baloch, Brachui and Afghans of Baluchistan and the North-West Frontier Province. Probably formed by a fusion of Turki and Persian elements, in which the former predominate. Stature above mean, complexion fair, eyes mostly dark, but occasionally grey, hair on face plentiful, head broad, nose moderately narrow, prominent, and very long. The feature in these people that strikes one most prominently is the proportions length of their noses, and it is probably this peculiarity that has given rise to the tradition of the Jewish origin of the Afghans.

The Indo-Aryan occupying the Punjab, Ryputana, and Kashmir, and having as its characteristics members the Rajputs, Khattris, and Jats. This type, which is readily distinguishable from the Turko-Iranian, approaches most closely to that ascribed to the traditional Aryan colonists of India. The stature is mostly tall, complexion fair, eyes dark, hair on face plentiful, head long, nose narrow, and prominent, but not specially long.

The Scytho-Dravidian, comprising the Maratha Brahmans, the Kunbis, and the Coorgs of Western India. Probably formed by a mixture of Scythian and Dravidian elements. This type is clearly distinguished from the Turko-Iranian by a lower stature, a greater length of head, a higher nasal index, a shorter nose, and a lower orbital-nasal index. All of these characters, except perhaps the last, may be due to a varying degree of intermixture with the Dravidians. In the higher groups the amount of crossing seems to have been slight, in the lower the Dravidian elements are more pronounced.

The Aryo-Dravidian or Hindustani, found in the United Provinces, in parts of Bal-

of the nose

The Mongolo-Dravidian, or Bengali type of Lower Bengal and Orissa, comprising the Maho-Bengal Brahmans and Khyashtas, the Medans or Eastern Bengali, and other groups peculiar to this part of India. Probably a blend of Dravidian and Mongoloid elements, with a strain of Indo-Aryan blood in the higher groups. The head is broad, complexion dark, hair on face usually plentiful, stature medium, nose medium, with a tendency to broad. This is one of the most distinctive types in India, and its members may be recognised at a glance throughout the wide area where their remarkable aptitude for clerical pursuits has procured them employment. Within its own habitat the type extends to the Himalayas on the north and to even to the population of Orissa, the western bulk of the population of Orissa, the western limit concedes approximately with the hilly country of Chota Nagpur and Western Bengal.

The Mongoloid, type of the Himalayas, Nepal, Assam, and Burma, represented by the Kanaks of Lahul and Kulu, the Lepchas of Darjeeling and Sikkim, the Limbus, Murmis and Gurungs of Nepal, the Bodo of Assam, and the Burmese. The head is broad, complexion dark, with a yellow tinge, hair on face scanty, stature short or below average, nose fine to broad, face characteristically flat, eyelids often cbligne

The Dravidian type extending from Ceylon to the valley of the Ganges, and pervading Madras, Hyderabad, the Central Provinces, most of Central India and Chota Nagpur. Its most characteristic representatives are the Pandiyans of Malabar and the Santals of Chota Nagpur. Probably the original type of the population of India, now modified to a varying extent by the admixture of Aryan, Scythian, and Mongoloid elements. In typical specimens the stature is short or below mean, the complexion very dark, approaching black, hair plentiful, with an occasional tendency to curl, eyes dark, head long, nose very broad, sometimes depressed at the root, but not so as to make the face appear

\* The material in this section is almost entirely taken from the Report on the Census of India, 1911, by Mr E. A. Galt, CSI, CIE, ICS, Fellow of the Royal Statistical Society



regular, but it is supplemented in many parts which contain the coarse districts of Orissa and North Malabar, with a rainfall of 60 inches, has a relatively low mean density, but this is because it includes on the west a considerable hilly area, while on the east near the sea the ground is intermediate strip, between the littoral and the hills, the density is as great as in parts of the lower Gangetic Plain. Want of water is the main explanation of the comparatively sparse population in several more or less level tracts such as Gujarat, Rajpootana East and Central India West, and the North-West dry area. In Assam there are extensive tracts of hill and jungle and sandy stretches in the strath of the Brahmaputra River, where permanent cultivation is out of question. The agricultural returns show that three quarters of the whole area is cultivable but this simply means that crops of some kind can occasionally be grown. The proportion of the area fit for permanent cultivation must be less than half that shown in the returns.

## TOWNS AND VILLAGES.

For town life than the lower, but the disproportionate is gradually disappearing, modern industrial developments are attracting the lower castes to towns in ever-increasing numbers.

**Urban and Rural**—The proportion of the urban to the total population has fallen during the decade from 9.9 to 9.5 per cent. The main explanation of this is undoubtedly the fact that plague has been far more prevalent in towns than in rural areas. This scourge has now spread to all parts of the Empire except the east and south. At the time of the census an epidemic was raging in many towns, especially in those of the United Provinces, Central India and the Central Provinces and Berar, and a large number of the regular inhabitants had gone away. In addition, however, to driving people away, plague has been responsible in many towns for a terribly heavy mortality. It is impossible to make any estimate of the direct and indirect effects of plague on the growth of towns, but it is quite certain that they have been enormous.

**Urban Tendencies**—We cannot draw any conclusions as to the tendency to urban aggregation from a comparison of the statistics of the present census with those of the previous one, when plague was still a new and more or less local visitation, but there can be no doubt that there is a growing tendency for people to congregate in towns of a certain kind. The introduction of machinery is rapidly causing the old cottage industries to be replaced by mills and factories and these are necessarily located at those places where there are the best facilities for collecting the raw material and distributing the manufactured article. The jute industry is practically confined to the banks of the Hooghly near the port of Calcutta. Cotton mills are found chiefly in Western India and woolen and leather factories at Cawnpore and Delhi. The increasing trade of the country and the improvements in railway communications also encourage the growth of towns. Not only are the great sea-ports attracting an ever-growing population, but various inland towns are benefiting from the same cause. The extent to which modern conditions of trade and industry are causing the growth of towns is obscured not only by plague, which is generally far more prevalent in towns than in rural areas, but also by the decay of old centres of population, which owed their importance to past political and economic conditions. Throughout India there are many former capitals of defined dynasties whose population is steadily dwindling. During the last ten years, Alaudpur, the last capital of the kings of Ava, has lost a quarter of its population.

**Sex in Towns**—In respect of the distribution by sex, the urban population in India presents a striking contrast to that of European countries. In Europe the proportion of females is larger in towns than in the general population, but in India it is considerably smaller, and the number of females per thousand males is only 847, compared with 958 in the population as a whole. The reason is that in this country the great majority of the domestic servants, shop hands and factory employes are males. The proportion is most marked in large trading and industrial centres where the number of immigrant-born population contains only 357 females per thousand males.

**Religion in Towns**—Of the Parsis no fewer than six out of every seven are resident in towns, and of the Christians more than one fifth. There is a marked contrast between these proportions and those for Hindus and Mohammedans who form the bulk of the population. Of the Mohammedans less than one-eighth, and of the Hindus less than one eleventh, reside in towns. In the case of the former the proportion rises to one sixth if we exclude the figures for Bengal, where the majority of the Mohammedans are the descendants of local converts. Amongst the Hindus the higher castes have hitherto shown a greater predilection

GROWTH OF THE INDIAN POPULATION

	1911	1901	1891	1881	1872
<b>INDIA</b>	315,100,300	291,301,000	287,314,071	253,800,100	200,162,000
<b>PROVINCES</b>	214,207,512	231,605,040	221,210,500	107,882,817	186,101,105
Ajmer-Merwara	601,305	470,012	542,358	100,722	306,331
Andamans and Nicobars	20,150	24,040	15,000	11,028	
Assam	6,713,635	6,841,878	5,477,302	4,907,702	4,150,760
Bihar	114,412	382,100			
Bombay	45,483,077	42,141,177	30,080,032	30,016,728	34,119,405
Bihar and Orissa	14,400,064	33,242,781	32,870,557	30,068,320	20,480,482
Bihar	23,752,000	23,360,212	23,581,538	22,418,367	10,736,027
Orissa	5,131,753	4,082,142	4,060,227	4,343,004	3,003,156
Chota Nagpur	5,005,302	4,000,420	4,028,702	4,225,080	3,107,000
Bombay (Presidency)	10,072,042	18,550,050	18,878,471	16,404,588	10,301,302
Bombay	16,113,042	15,304,700	15,050,202	14,042,021	14,076,508
Sind	3,513,435	3,210,910	2,875,100	2,875,100	2,200,565
Aden	46,165	43,074	44,079	34,860	10,280
Hurma	12,115,217	10,400,024	7,722,058	3,736,771	2,747,118
Central Provinces and Berar	13,010,308	11,071,452	11,048,072	11,043,303	9,051,268
Central Provinces	10,850,140	9,217,436	10,161,481	9,270,000	7,729,014
Berar	3,057,162	2,754,016	2,807,401	2,672,673	2,227,654
Coorg	174,070	180,007	173,055	178,302	108,312
Madras	41,406,404	38,220,054	37,044,428	30,811,154	31,230,022
North-West Frontier Province (Districts and Administered Territories)	2,100,033	2,041,534	1,857,510	1,575,043	17,000,072
Punjab	10,074,056	20,330,337	10,000,308	17,274,507	17,000,072
United Provinces of Agra and Oudh	47,182,044	47,602,277	46,003,512	44,140,050	42,002,004
Agra	34,024,040	34,850,100	34,254,588	32,762,127	30,780,001
Oudh	12,558,004	12,333,108	12,050,024	11,357,832	11,221,043

## CITIES.

percent. The falling off is due largely to the growing tendency of the inhabitants to make their home in the suburbs or even further afield. The suburban municipalities have grown during the decade by 45 per cent.

**Bombay**—which has now a population of 979,445 was a pretty town with about ten thousand inhabitants when it passed into the possession of the British in 1661. The population was estimated to be 100,000 in 1750, 180,000 in 1814 and 236,000 in 1836. At the first regular census in 1872 it had risen to 644,405, and nineteen years later, in 1891, it was 821,764. In the next decade plague, which first appeared in September 1896, caused a serious setback, and it is estimated that by 1901 this disease had already been responsible for 114,000 deaths. The census of that year showed a decrease of about 6 per cent, but this was not wholly due to deaths. At the time when the census was taken, a virulent epidemic was in progress, and large numbers of the permanent residents had sought safety in flight. A fresh enumeration taken in 1906 by the Health Department of the Municipality gave a population of 959,537. The number now returned exceeds that of 1901 by 26 per cent but it is only 2 per cent more than it was at the time of the local enumeration of 1906. It is said that the census of 1911 was taken at a time when many of the immigrants from neighbouring districts had gone to their permanent homes for the Holi holidays, and that many of the cotton mills had closed down temporarily owing to the prohibitive price of the raw material. Like other large trading and industrial centres, Bombay is peopled mainly by immigrants, and more than 80 per cent of its inhabitants were born elsewhere. Most of them come from the neighbouring districts, more than one-fourth of the total number are from Ratnagiri, while four of other districts together supply more than a third. There are 30,000 Goanese, most of whom are in domestic service. Of the immigrants from outside the province, some 50,000, chiefly mill hands, are from the United Provinces, and 12,000 mainly shopkeepers, from Rajputana. Of the immigrants from outside India the largest number (6,000) come from the United Kingdom.

The general practice of statisticians is to treat as cities only those places which have a population of more than 100,000. According to this standard there are in India only 30 cities, with a population of 7,075,782, or 2·5 per cent of the population. Here there is an extraordinary difference between the Indian conditions and those of Western countries. In England the cities contain 45 per cent of the total population, in Germany 21, and in France 14 per cent. But even in these countries the growth of cities is comparatively recent. In 1871 England had only 27 cities with 9·5 million inhabitants and Germany only 8, with 2 millions. There are signs that in India the growth will be more rapid in the future than it has been. The population of cities has risen since 1872 by 64 per cent and the net increase, comparing like with like, is 43 per cent. The most rapid growth during this period is shown by Kanung which has trebled its population. Next comes Karachi with an increase of 108 per cent and then Madras and Bombay with 158 and 113 per cent respectively. Since 1901, two new places, Jubbulpore and Dacca, have entered the list of cities, while Baroda has disappeared from it. Eighteen cities have gained, and twelve have lost, population. Of the latter, a few like Mandalay are really decadent, but in most, such as Nagpur and Calcutta, the loss was due wholly to the temporary influence of plague. The progressive cities are differentiated from those which are decadent by their large immigrant population. In Bombay, Calcutta and Howrah this exceeds 70 per cent of the total and in Kanung and Karachi it is close on 60 per cent. In Patna, Mandalay and Bareilly, on the other hand, it is barely 10 per cent.

**Calcutta**—In speaking of Calcutta we may mean Calcutta proper, or the area administered by the Calcutta Municipal Corporation with the port, fort and canals, the population of which is 896,067, or this area plus the suburban municipalities of Cossipur-Cliphore, Alanketola and Garden Reach with 1,043,807 inhabitants, or lastly Greater Calcutta, which also includes Howrah, with an aggregate population of 1,222,913. The suburban municipalities differ from Calcutta only in respect of their Municipal Government. From a structural point of view they cannot be distinguished. The buildings are continuous throughout, and there is nothing to show where one municipality begins and the other ends. A striking feature of the statistics is the large number of immigrants. Less than 29 per cent of the inhabitants of Calcutta proper claim it as their birthplace. The vast majority are immigrants of whom 20,000 come from Bihar and Orissa and 90,000 from the United Provinces. Of the Bengal districts, the largest contributions are from the 24 Parganas (88,000), Hooghly (48,000) and Midnapur (29,000). The volume of immigration is equally great in the suburbs and Howrah.

The first regular census of Calcutta proper taken in 1872 showed a population of 638,009. In 1881 there was practically no change, but in 1891 a gain of 11·4 per cent was recorded. In 1901 there was a further increase of 24·3 per cent, but part of this was due to improved enumeration. At the present census the rate of increase in Calcutta proper has dropped to 5·7



GROWTH OF THE INDIAN POPULATION—continued

	1911	1901	1891	1881	1872
<b>STATES AND TERRITORIES</b>					
Assam State (Manipur)	70,888,851	62,755,116	60,073,835	55,013,511	20,908,025
	310,222	281,165		221,070	
Baluchistan States	120,201	128,610			
Baroda State	2,032,798	1,952,002	2,415,306	2,182,158	1,907,508
Bengal States	822,565	710,200	710,310	608,261	567,827
Bihar and Orissa States	3,045,200	3,314,474	3,028,018	2,410,611	1,723,900
Bombay States	7,411,075	6,008,550	8,081,050	6,937,803	6,707,970
Central India Agency	9,356,980	8,107,805	10,136,403	9,261,907	
Central Provinces States	2,117,002	1,631,140	1,772,562	1,387,294	928,116
Coastal State	13,374,676	11,141,142	11,537,010	9,815,501	
Coastal States	3,158,126	2,006,575	2,543,052		
Madras States	4,811,811	4,188,086	3,700,622	3,341,840	3,280,302
Mysore State	6,800,103	5,539,300	4,943,004	4,186,188	5,055,402
N. W. P. Province (Agency and Tribal areas)	1,022,004	83,902			
Punjab States	4,212,704	4,424,308	4,263,280	3,561,083	
Rajputana Agency	10,530,432	9,853,306	12,171,740	9,034,255	
Sikhian State	87,020	59,014	30,458		
United Provinces States	832,036	802,007	792,401	741,750	638,720

## HOUSES AND FAMILIES.

have been enumerated within the city limits as compared with 1901 the net gain due to migration is less than 9,000. It is possible that the great demand for labour in Burma, where wages are very high, has attracted many of the labouring classes who would otherwise have sought their living in Madras.

Generally speaking it may be said that the labouring classes in India live in one, or at the most two, single room butts. The home of a well-to-do peasant consists of a public sitting room and a cook room and several apartments which are arranged round and open on to a courtyard in spite of the joint family system the number of houses corresponds very closely to the number of families in the European sense. The total number of houses is 63.7 million, and there are 64.6 million married females aged 15 and over. Except amongst the higher castes who

## MOVEMENT OF THE POPULATION.

Bombay in 1896, it has by March 1901 caused a recorded mortality of half a million. Since then it has continued its ravages, especially in Bombay and Upper India. The mortality from 1901 to 1907 it fell below a quarter of a million in each of the next two years, but in 1910 it exceeded half a million. The total number of deaths from plague during the decade occurred in the Punjab and two-fifths in the United Provinces and Bombay, taken together. The disease fortunately has failed to establish itself in Bengal, Assam, and on the East Coast. This however is only the recorded mortality, in time of epidemics the reporting agency breaks down and large numbers of deaths escape registration. Plague attacks women more than men, and people in the prime of life more than the young and old. If plague is omitted, and it is assumed that the mortality of the decade would otherwise have remained normal, the population of the census of 1911 would have been greater than it was by at least 6.5 millions. In other words, the population would have increased by 9.5 instead of 7.1 per cent.

General Conclusions.—The most noticeable feature is the continuous rapid growth in Burma. Lower Burma has grown by 135 per cent since 1872 and the whole Province including Upper Burma, which was annexed in 1886, by 37 per cent. In Assam including Manipur the increase since 1872 amounts to 70 and in the Central Provinces and Berar to 47 per cent. In the other main provinces the rate of growth has been much slower. In some provinces, such as Burma, Assam and Bengal there has been continuous progress but others, at some time or another, have sustained a set-back. In the latter provinces at least, the internal variations are also frequently considerable. In Bengal one district has at the present time a smaller population than it had in 1872, while four others have more than doubled their population since that date.

In addition to the causes which ordinarily govern the movement of the population, India is subject to two special factors—namely and epidemic disease. The decade preceding the census of 1911 was free from widespread famines such as those of the preceding ten years. In 1907 there was a partial failure of the monsoon which was felt over a wide area, extending from Bihar to the Punjab and Bombay, and causing actual famine in the United Provinces and in a few districts elsewhere. Prices ruled high in most years and there was an extension of special crops, such as jute and cotton, which are more profitable to the cultivator than food grains. It was on the whole a period of moderate agricultural prosperity. From the point of view of public health, the general period would have been an average one, but for the ravages of plague. Breaking out in 1907, the rate of increase especially amongst infants, which checks European country, and it is the heavy mortality in India the birth-rate is far higher than in any of the nations in Europe, but it considerably exceeds that of the Latin nations. In France the population has grown by less than 7 per cent since 1870, but this is because of its exceptionally low birth-rate. In India the birth-rate is far higher than in any European country, and it is the heavy mortality especially amongst infants, which checks the rate of increase.

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# ANNUAL GROWTH OF THE INDIAN POPULATION

INDIAN PROVINCES	1901 to 1911				1911 to 1921				1921 to 1931				Total Increase 1901 to 1931
	Population 1901	Population 1911	Population 1921	Population 1931	Population 1901	Population 1911	Population 1921	Population 1931	Population 1901	Population 1911	Population 1921	Population 1931	
Ajmer-Merwar	+1,279	10	+706	11	+177	970	+108,640	1,012	+1,180,040	+1,081,109	+1,180,040	+1,180,040	+1,180,040
Andaman and Nicobar	+1,601	602	+10	610	+1,611	610	+1,611	610	+1,611	610	+1,611	610	+1,611
Assam	+21,481	+1,510	+1,116	+1,116	+1,116	+1,116	+1,116	+1,116	+1,116	+1,116	+1,116	+1,116	+1,116
Baluchistan	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510
Bengal	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510
Bihar and Orissa	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510
Bihar	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510
Orissa	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510
Chota Nagpur	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510
Bombay (Presidency)	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510
Bombay	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510
Sind	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510
Aden	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510
Burma	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510
Central Provinces and Berar	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510
Central Provinces	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510
West Frontier Province (District and Tribal Territories)	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510
United Provinces of Agra and Oudh	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510
Agra	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510
Oudh	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510	+1,510

Growth of the Population

## MIGRATION.

with three quarters of the total population, and a loss of 5·3 per cent in the remaining one-fourth of the area and one-fourth of the population. The contrast in different parts of the Native States is still more striking. The net increase of 10·3 per cent is the outcome of a gain of 1·4 per cent in four-fifths of the total area and population, coupled with a loss of 6·2 per cent elsewhere. The relatively greater net increase in the Native States as compared with British territory is explained by the fact that many of the States suffered severely from famine in the previous decade when they sustained a net loss of 5 per cent, while British territory gained 4·7 per cent apart from this, in ordinary circumstances a comparatively high rate of increase is to be expected in the Native States, as they are, on the whole, more undeveloped than British territory, and contain a much larger proportion of cultivable waste land. The net increase in India as a whole during the last decade is the result of a gain of 10·3 per cent in an area of 1,517,000 square miles, with a population of 245 millions and a present density of 162 to the square mile, and a loss of 5 per cent in an area of 218,000 square miles with a population of 68 millions and a density of 312 to the square mile.

there is a large local supply of labourers, chiefly from the southern coast strip called the Kōkan. The United Provinces gave more than four times as many labourers to Bengal as to Bombay. As for the migration between British India and Native States, it involves a loss of 135,000 to the Native States—Of the 504,000 persons born in other Asiatic countries who were resident in India at the time of the census, more than half were natives of Nepal or of the 92,000 immigrants from Afghanistan all but 11,000 were enumerated in Northern India. The rest were cold weather visitors who travel about the country peddling piece-goods and other articles of clothing. These Gadhū pedlars cause great trouble in Bengal by their truancy. The number of Chinese is 50,000. Most of these are found in Burma, but the Chinaman is making his way into Bengal, where he is appreciated as a shoemaker and carpenter. From Arabia come 23,000 immigrants, chiefly to Bombay.

**Asiatic Immigration**—Of the 504,000 persons born in other Asiatic countries who were resident in India at the time of the census, more than half were natives of Nepal or of the 92,000 immigrants from Afghanistan all but 11,000 were enumerated in Northern India. The rest were cold weather visitors who travel about the country peddling piece-goods and other articles of clothing. These Gadhū pedlars cause great trouble in Bengal by their truancy. The number of Chinese is 50,000. Most of these are found in Burma, but the Chinaman is making his way into Bengal, where he is appreciated as a shoemaker and carpenter. From Arabia come 23,000 immigrants, chiefly to Bombay.

**Non-Asiatic Immigration**—The total number of immigrants from countries outside Asia is 146,205. Of these 131,668 came from Europe. The United Kingdom sends 122,919, Germany comes next with only 1,860 and then France with 1,478. As compared with 1901 there is an increase of about 26,000 in the number of immigrants from the United Kingdom. Of the British-born 77,626 were serving in the army as compared with 60,965 at the time of the previous census, when a strong contingent had been sent from India to reinforce the British garrison in South Africa. The rest of the increase is accounted for by the industrial development which has taken place, the extension of railways, and the growing extent to which Englishmen in India marry. The number of females born in the British Islands and enumerated in India has risen during the decade from 14,663 to 19,194. The figures for other European countries do not call for any special comment.

**Emigration from India**—The Indian census statistics naturally tell us nothing of the migration from India to other countries. This emigration is of two kinds, the movement across the border which separates India from contiguous countries, such as China, Nepal, Afghanistan and Persia, much of which is of the casual type, and emigration to distant countries. No statistics are available regarding the emigration from India to the countries on its borders. There is probably very little movement from Burma into China

In India there are two currents of migration—minor and major. The chief of the minor movement is the custom, almost universal amongst Hindus, whereby parents seek wives for their sons in a different village from their own. Of the 26 million natives of India who were enumerated in a district other than that in which they were born, 16·5 millions, or 62 per cent were born in a district adjoining that in which they were enumerated. The major currents of migration are governed by economic conditions. The most noticeable movements are the large streams of emigration from Bihar and Orissa, the United Provinces into Bengal, Assam and Burma. Owing to its fertile soil, Bengal is able to support practically the whole of its dense indigenous population by agriculture. It is necessary therefore to man the jute mills by imported labour, and to draw the general labour supply from outside. In Bengal the net excess of immigrants over emigrants is close on 1,400,000. Of these about 236,000 are Natives of a district in Bihar and Orissa, or Assam, contiguous to the Bengal district in which they were enumerated. Assam and Burma are sparsely populated and the land available for cultivation being ample, very few of the indigenous inhabitants find it necessary to work for hire. The tea gardens of Assam and the rice mills and oil wells of Burma have to obtain their coolies elsewhere. In Assam 12·5 per cent and in Burma 5 per cent of the population are immigrants. On an average 51,000 labourers and dependants go each year to the tea gardens of Assam. In Burma, Madras supplies labourers for the rice-milling, oil and other industries, whilst many coolies flock into the province from Chittagong, chiefly for the rice harvest. The net loss to Bihar and Orissa on account of migration is about 1·5 millions. The United Provinces sustain a net loss of about 800,000 from migration, chiefly in the direction of Bengal. Madras being very backward from an industrial point of view, there is no great local demand for labour. At the same time there is an exceptionally large population of the 'untouchable' castes, who have no scruples about seeking their livelihood overseas. It provides Ceylon with labour for its plantations, Burma with labour for its industries, and the Federated Malay States with labour for their rubber plantations. The enterprising Marwari traders of Rajasthan have penetrated to all parts of India and are to be found in very important bazars throughout Bengal and even in Assam. Bombay is industrially more advanced than Bengal, but as its soil is less productive



who came from beyond the sea were looked upon as beings of a different clity. They were assimilated much of the influences of their Hindu environment. But they remained all the same separate communities, and no attempt was made to incorporate them in the great mass of Hinduanism. The prohibition of sea voyage to members of the higher castes is another proof of the peculiar prejudice which ancient Hinduan cherished against inhabitants of countries divided from India by intervening seas

**Origin of Hinduanism**—We have spoken alone of Hinduanism as being autochthonous

The opinion generally held is that the ancestors of the Vedic Indians were immigrants from Central Asia. An Indian scholar of some repute has recently endeavored to show that the received opinion is not borne out by the evidence available in the ancient literatures of India. Whatever may be the value attaching to his contention that the Vedic Indians were not immigrants or descendants of immigrants, but only a section of the indigenous population added to the cult of the-worship, it is true, as he says, that there is no expression in the Vedas of a longing, lingering remembrance of a foreign homeland, such as one might expect to find in the literature of an immigrant race. This is all the more remarkable as an intense attachment to the land they lived in is manifest in all their compositions. A Sanskrit couplet in which the names of the seven great rivers of India, the Ganges, the Jumna the Godavari, the Saraswaty, the Nerbudda, the Indus and the Caucery, are strung together in pious praise, is recited daily by millions of Hindus at their daily devotions, and helps to keep them in mind of the sanctity of the Indian Continent in Hindu eyes. If the ancient Hindus were immigrants, they not only took care to blot out all memories of the land from which they came from their own minds, but they also strove by every means in their power to bind the reverence and love of their posterity to India as the land *par excellence* of religion and morality, so much so that the name Hindu, in the orthodox acceptance of the term, is not applicable to anyone who is not born in India. If the ancestors of the Hindus were foreigners in India, they must have set themselves, as a matter of deliberate policy, to intertwine the deepest affections and the highest aspirations of their race with the land in which they had settled, for the entire exclusion of the land whence they had come

**Evolution of Hinduanism**—Following from the theory that the ancestors of the Hindus were immigrants from Central Asia, is the explanation generally given of the varieties of religious beliefs and social practices to be found within the pale of Hinduanism, Hinduanism, it is the common idea, was originally a pure and simple creed which has had to compromise with the animism of the population, amongst whom it spread, by accepting several of its gods and superstitions. The greatest obstacle in the way of this explanation is that there is no record whatever of any organized missionary activity among the Hindus at any time. The immense distances and the absence of means of communication would

And yet, though Hinduanism refuses to conform to almost every one of the ideas which we usually associate with the term "religion," it is impossible to deny that it occupies a unique and highly important place amongst the religious systems of the world. The reason why it does not fit into our definition of religion is that it represents a fundamental difference of type of evolution in the history of religion.

Moreover, a compromise, implies selection and rejection, and the existence of some agency entrusted with the duty of selection. As a fact, however, we find that Hinduanism has exercised very little selection, and that it covers practically all the beliefs and customs which prevail amongst the tribes who are included within its pale. Such a state of things is more consonant with the view that the pure forms of Hinduanism are highly evolved stages of the cruder forms which are still observed by the less educated and prosperous sections of the community. This view, namely that the higher forms of Hinduanism are evolved from lower ones, rather than that the latter are corruptions of the former, gains support from what is now generally accepted as being the true explanation of the origin of certain social customs. Twenty years ago, it was generally held that the custom of child marriage, for instance, was of sacerdotal origin and was most largely prevalent amongst the higher castes from whom it spread to the lower. Recently, however, it has been proved that child marriages are prevalent in more largely that amongst the latter, it is a survival from the times when the caste system was less rigid and intermarriages, that is to say, the taking of wives by the higher castes from the lower, were common. It may be added that the two most characteristic beliefs of Hinduanism, namely, that in the transmigration of souls and in the law of Karma or retribution, are held with, if anything, more tenacity by the lower than by the higher castes

**Scope of Hinduanism**—From this point of view, the varying beliefs and customs which go under the name of Hinduanism not only offer no difficulties, but furnish the right clue to other understandings of this unique socio-religious system. They explain why the term "religion" as applied to Hinduanism does not adequately express its scope and method. Hinduanism has no settled creeds which are obligatory on every Hindu. It enforces no fixed and uniform moral standards on the immutable sects and castes which bear its name. It extends its influences to monogamous, polygamous, and even polyandrous unions, between the sexes and in the case of the so-called *devadasis*, countenances a life of open irregularity. An Indian newspaper recently instituted an interesting discussion on the question "Who is a Hindu?" An eminent Hindu lawyer, who subsequently rose to be a judge of one of the Indian High Courts, laid down that a Hindu was one to whom the Indian Courts would apply the Hindu law. The learned lawyer, however, forgot that there are Alghomedan castes which follow the Hindu law in regard to the inheritance of and succession to property.

## STATISTICS OF RELIGIONS

Religion	India	Brahmanic	Arya	Sikh	Jain	Buddhist	Zoroastrian (Parsi)	Muslim	Christian	Jew	Aunt-in	Minor Religions and Religion not returned	Not enumerated by Religion
Native States	70,888,864	53,065,461	53,956,563	8,604	294	842,558	77,044	13,941	9,223,410	1,383,919	2,947,144	84,761	1,608,556
	244,267,642	163,621,431	163,381,380	234,841	5,210	2,171,508	10,044,409	86,155	57,423,889	2,492,284	7,948,024	2,340	1,608,556
British Provinces	315,156,396	217,137,943	243,445	2,014,466	1,248,182	10,721,453	100,096	60,647,209	3,876,203	20,980	10,295,168	37,101	1,608,556
	102,905,904	1,262,387	17,280	24,120	317,338	31,218	31,746,003	5,129,303	151,396,156	294,875,811	18,539,578	1,670,357	1,608,556
Total	1,013,596	1,013,596	1,013,596	1,013,596	1,013,596	1,013,596	1,013,596	1,013,596	1,013,596	1,013,596	1,013,596	1,013,596	1,013,596
	1,013,596	1,013,596	1,013,596	1,013,596	1,013,596	1,013,596	1,013,596	1,013,596	1,013,596	1,013,596	1,013,596	1,013,596	1,013,596

## POPULATION ACCORDING TO RELIGION AND EDUCATION (CENSUS OF 1911)

Religions	Total Population	Illiterate	Literate	Literate in English
Total Males	160,418,470	143,479,653	16,938,815	1,518,361
	110,965,731	99,642,587	11,223,134	1,013,596
Total Females	152,996,919	151,396,156	1,600,763	152,026
	106,720,714	105,905,904	814,810	23,659

Hindu	110,965,731	99,642,587	11,223,134	1,013,596
Sikh	1,734,773	1,550,610	184,163	11,480
Jain	643,553	324,968	318,585	18,030
Buddhist	5,286,142	2,151,761	2,134,381	21,767
Parsi	51,123	11,128	39,995	25,334
Muslim	34,700,363	32,319,598	2,380,766	176,061
Christian	2,010,724	1,422,154	588,570	252,591
Aunt-in	3,088,241	5,034,403	53,833	1,521
Minor and Unspecified	28,818	22,430	6,388	2,081
Total Males	160,418,470	143,479,653	16,938,815	1,518,361
Hindu	106,720,714	105,905,904	814,810	23,659
Sikh	1,279,667	1,262,387	17,280	238
Jain	604,629	580,509	24,120	209
Buddhist	5,435,086	5,117,748	317,338	1,383
Parsi	48,973	17,755	31,218	8,347
Muslim	31,883,812	31,746,003	137,807	3,940
Christian	1,865,472	1,613,177	252,293	112,643
Aunt-in	5,129,303	5,129,316	2,987	71
Minor and Unspecified	29,263	26,355	2,908	1,533
Total Females	152,996,919	151,396,156	1,600,763	152,026
Total Population	313,415,389	294,875,811	18,539,578	1,670,357

thought. In other races the line of evolution was from polytheism to monotheism, but in India it was from polytheism to the higher pantheism. Contrasting the development of the Hindu idea of God with that of the Hindus, Dr Harold Harding observes: "With the Hindus there was no God who claimed sole sway, they went back to the power which makes all gods what they are, to the inner aspirations and needs which find vent for themselves in prayer and sacrifice. Following an extremely remarkable line of thought that which drives men to worship gods was itself regarded as the true divine power. Brahma meant originally the magical, creative word of prayer, but it afterwards came to denote the principle of existence itself, so that we have a transition from the idea of motion towards to that of its goal, from prayer to the object addressed in prayer." The Indian philosopher saw the whole universe transused and overpread with Deity. He perceived how evil was being perpetually transmuted to good in the cosmic process spreading out before the poet and the philosopher, endless and timeless, to whom the evil and the good seemed but different stages in a great common process of which the secret was known only to the Supreme Being. No European writer has caught the innermost essence of the Hindu philosopher's idea of the Supreme, so faithfully, and expressed it so felicitously as Sir Edwin Arnold in his "Light of Asia".

Before beginning, and without an end, As space eternal and as surety sure, Is flared a Power divine which moves to Only its laws endure.

It is not marred nor stayed in any use, All like it, the sweet white milk it brings To mothers' breasts, it brings the white drops too.

Where with the young snake sings It slayeth and it saveth, nowise moved Except unto the working out of doom, Its threads are Love and Life, Death and Pain.

The shuttles of its loom It maketh and unmaketh including all, What it hath wrought is better than had been,

Slow grows the splendid pattern that it plans

Its wistful hands between The ethical values of Hinduism are not different from those of other great religions. Like them it attaches little importance to the qualities which make for worldly success, and most importance to self-sacrifice, humility and kindness to all. Only its methods differ. On the whole, however, the Hindu socio-religious scheme, owing to its tendency to make the individual human being a passive instrument in the hands of a Higher Power instead of an active co-operator with it, has favoured stability at the expense of progress.

**Hindu sects**—Hinduism is made up of many sects and cults. It is usual to speak of Hinduism as it was before Buddhism, as a single creed, but this is because the literature of the sect that came to supersede all others that has come down to us is the literature of Hinduism.

**Hinduism**—The Hindus number 217,586,892 or 69.4 per cent of the total population of India. Even the Vedas themselves are the literature of the lines, discover the existence of rival sects probably of one of several sects which happened to be gifted with a talent for letters. The rapid multiplication of sects, however, was undoubtedly encouraged by the introduction of idol worship in imitation of the practice of decadent Buddhism. Hindu religious philosophers recognised three ways of salvation, namely, the way of knowledge, the way of faith and the way of service. Every sect of Hinduism recognises the value of all these three ways, but it differs as to the relative importance to be attached to each. The sect of the great philosopher, Sankaracharya, who maintained that the Supreme Being was the only Reality and that all the phenomenal universe was Maya or illusion, and that salvation came from the realisation of this fact, did not discard faith and service altogether, but only gave these a subordinate position in his scheme of religion. Ramanuja, Alvars and Vallabhacharya who followed him and, in more or less degree, retained his doctrine of the non-reality of the phenomenal universe, laid more stress on faith and service than on knowledge, but they did not discard the path of knowledge altogether. It should be mentioned here that it has been the great misfortune of Hinduism that the path of service has come to mean the path not of altruistic service to mankind but the path of service conceived in a ceremonial sense to priests, religious recluses and mendicants and to idols. It is the great aim of the modern religious reform movements to rescue the path of service from this spurious interpretation and to make altruistic social service an integral part of religion. The question of sect, however, does not play a very important part in Hinduism. Except in Southern India, to a much smaller extent in Western India, the great mass of the Hindus are not sectaries. In Southern India, the Vaisnavas and Madhvas will, on no account, worship Shiva or visit a temple dedicated to him. The Lingayaths are a Shiva sect round the Madras Presidency, and in Mysore, and they have an invincible repugnance to the worship of Vishnu. But these are exceptional instances. But so far as the bulk of the Hindus are concerned, they resort to the nearest shrine whatever it be dedicated to Shiva or Vishnu. The attitude of Hinduism to other religions is that they are each of them the most suitable path to salvation for the people who are born in them—that they are all several roads which lead to Heaven. For this reason Hinduism has never been a proselytising religion. This has proved a disadvantage to it face to face with such religions as Mohammedanism and Christianity which not only admit converts, but are actively engaged in seeking them. The proportion of Hindus to the total population has steadily diminished during the last forty years, partly owing to conversions to other religions particularly from amongst the lower classes. Conversions from amongst the lower classes ceased.

**Hinduism**—The Hindus number 217,586,892 or 69.4 per cent of the total population of



## OCCUPATIONS OF THE INDIAN PEOPLES

INDIA	
I—PRODUCTION OF RAW MATERIALS	227,030,092
I— <i>Exploitation of the Surface of the Earth</i>	226,550,483
Pasture and agriculture	224,693,900
(a) Ordinary cultivation	216,787,137
(b) Growing of special products and market gardening	2,012,503
(c) Forestry	672,093
(d) Raising of farm stock	5,176,104
(e) Raising of small animals	48,063
Fishing and hunting	1,854,583
II— <i>Extraction of Minerals</i>	729,609
Mineral	373,927
Quarries of hard rocks	73,424
Salt, etc.	73,258
3—PREPARATION AND SCULPTURE OF MATERIAL SUBSTANCES	53,191,121
III— <i>Industry</i>	33,323,041
Leather	8,306,501
Hides—skins and hard materials from the animal kingdom	698,741
Wood	3,799,892
Metals	1,861,445
Ceramics	2,240,210
Chemical products properly so called, and analogous	1,241,537
Industries of dress and the toilet	3,711,675
Furniture industries	7,750,609
Building industries	39,268
Construction of means of transport	2,062,493
Production and transmission of physical forces (heat, light, electrical, motive power, etc.)	66,056
Industries of luxury and those pertaining to literature and to arts and sciences	14,384
Industries concerned with reuse matter	2,141,665
IV— <i>Transport</i>	1,383,515
Transport by water	5,023,900
Transport by road	932,760
Transport by rail	778,193
Post Office, telegraph and telephone services	106,493
P— <i>Trade</i>	201,781
Banks, establishments of credit, exchange and insurance	17,839,102
Brokers, commission and export	1,220,187
Trade in textiles	240,853
Trade in skins, leather and furs	1,277,469
Trade in wood	296,712
Trade in metals	224,333
Trade in pottery	59,766
Trade in chemical products	101,931
Hotels, cafes, restaurants, etc.	171,927
Other trade in food stuffs	719,052
Trade in clothing and toilet articles	9,478,863
Trade in furniture	306,701
	173,413

India Buddhists and Jains together number 11,969,635. Thus 229,556,527 or about 73 per cent of the Indian people depend for their spiritual sustenance on Hinduism and its offshoots. The Buddhist population is mostly Burmese, and Buddhism having ceased a thousand years ago to count as a leading religion in the land of its birth, several reasons are usually given to account for the hostility of Hinduism to Buddhism, such as that Buddha denied the authority of the Vedas and the existence of God and of the human soul. Jainism did all this, and yet Jains to day occupy a recognised position in the Hindu social system. The real reason for the Hindu hostility to Buddhism was that it influenced and was in its turn influenced by in the later years of its prevalence in India, the alien Mongolian consciousness of indigenous heresies, but it is jealous of outside influence. Indian Buddhism, too, had become extremely corrupt and superstitious long before Hinduism re-established itself as the religion pre eminently of the Indian people.

**Other Indigenous Religions**—Buddhism and Jainism were originally only sects of Hinduism. Jainism now is not so sharply divided from the latter religion as Buddhism is. Jains are everywhere a recognised section of Hindu Society, and in some parts of the country there has been an increasing tendency on their part to return themselves at the Census as Hindus. The outstanding feature of Jainism is the extreme sanctity in which all forms of life are held. The Jains are generally bankers and traders. Their number at the 1st Census was 1,248,182, the apparent decline being due to the tendency noted above for Jains to return themselves as Hindus. Buddhism is professed but by few persons in India. The Buddhist population of the Indian Empire is mainly Burmese. Their number is 1,721,453. The founders of Buddhism and Jainism are believed to have been contemporaries, whose date is assigned somewhere in the 5th Century B C. Sikhism, which is the next important indigenous religion, had its origin many centuries later. The founder of Sikhism,

## Non-Indian Religions

Guru Nanak, flourished in the latter half of the 15th Century of the Christian era. Nanak's teaching amounted to nothing more than pure Theism. He taught that there is only one true God, he condemned idolatry, proclaimed the futility of pilgrimages and rites and ceremonies through good deeds combined with devotion to the Supreme Being. Life preached the brotherhood of men. Sikhism continued to exist as a pacific cult till about the end of the seventeenth century, when the persecutions of Aurangzeb laid the effect of converting it into a militant creed. This momentous change was accomplished under the direction of Guru Govind, the tenth and last of the Gurus. "I shall send a sparrows," he once exclaimed and "so! the imperial falcons will fly before it." On his death-bed, he exhorted his followers to regard the Granth, the sacred book of the Sikhs, as their Guru, to look upon it as the person of the living Guru. After his death, Sikhism passed through a period of deep gloom, but it soon recovered and in 1758, the Sikhs entered Lahore in triumph. The teachings of Guru Nanak have profoundly affected Hindu thought and life in the Punjab though the number of persons professing the Sikh religion is only 3,014,466 according to the 1911 Census. This represents an increase of over 40 per cent since 1901. Two other religious movements, offshoots of Hinduism, remain to be mentioned, namely, the Brahmo-Samaj and the Arya-Samaj. Both of them are less than one hundred years old. The founder of the former was Raja Ram Mohan Roy, and of the latter Swami Dayanand Saraswati. The Brahmo-Samaj does not believe in an infallible scripture, while the Arya-Samaj accepts the Vedas as Divinely revealed. Both the movements are opposed to idolatry and favour social reform. The Brahmo movement, appealing as it does to the cultured intellect, has not been making as much progress as the Arya-Samaj. The number of persons professing each of these creeds is 5,501 and 243,445 respectively. The stronghold of the Arya-Samaj is the Punjab, that of the Brahmo-Samaj, Bengal.

The customs and beliefs of Hinduism. The writer of the article on religions of India in the new edition of the *Imperial Gazetteer* observes of Islam in India, "It has gained from it many of those practices which distinguish it from the original faith or Arabia. But degrees the fervid enthusiasm or the early raptures was softened down, and if the Mohammedan of the later days could never conceal his contempt for the faith of his 'pagan' neighbours, he came to understand that it could not be destroyed by persecution. From the Hindus Islam derived much of its demonology, the belief in evil spirits, and the veneration of departed Pirs or Saints. The village Musulman of the present day employs the Hindu astrologer to fix a lucky day for a marriage, or will pray to the village god to grant a son to his wife. This is the more natural, because conversion to Islam, whenever it does occur, is largely from the lower castes." Mohammedanism has

greatly influenced by Hindu ideas and institutions. Moreover, the Indian converts to Islam have existed in India side by side with Islam has existed in India side by side with Islam. During that period it has been August 825 A D. For about twelve centuries, of the commencement of the era is the 25th man Ferman the last of the Ferman Kings, to popular tradition, from the departure of Chenu. The Kollam era of Malabar dates, according to priests, had settled in or near Mangalore named Alalack Alledna, accompanied by some Cochlin Tribes and Castes refers to a tradition of conquest, they were settled in Cochlin as traders and missionaries. The author of the number of followers in this country is about 100,000. One hundred years before the Muhammadans outside India the religion which has the largest number of religious which had their origin that is, of religious which had their origin in non-Indian religions, Muhammadanism—Of non-Indian religions,

OCCUPATIONS OF THE INDIAN PEOPLES—*cont.*

C—PUBLIC ADMINISTRATIONS AND LIBERAL ARTS	
Trade in building materials	51,617
Trade in means of transport	5,110
Trade in fuel	524,917
Trade in articles of luxury and those pertaining to letters and the arts and sciences	522,150
Trade in refuse matter	3,635
Trade of other sorts	2,194,554
10,912,123	
VI—Public Force	
Army	2,099,586
Navy	667,275
Police	4,649
2,771,510	
VII—Public Administration	
Religion	5,925,57
Law	2,763,489
8,689,068	
VIII—Professions and Liberal Arts	
Medicine	67,814
Education	671
Letters and arts and sciences	951,167
1,019,492	
IX—Persons living principally on their Income	
D—Miscellaneous	
X—Domestic Service	
XI—Insufficiently described Occupations	
XII—Unproductive	
Inmates of jails, asylums and hospitals	1,521,81
Leaguers, vagrants and prostitutes	18,721
1,540,531	

## DISTRIBUTION OF THE POPULATION

India

British





SEX

In India as a whole the proportion of females per thousand males rose steadily from 954 in 1881 to 963 in 1901. It has now fallen again to exactly the same figure as in 1881. The important aspect of these figures is the great contrast they show between India and Europe, where the number of females per thousand males varies from 1,093 in Portugal, and 1,068 in England and Wales, to 1,013 in Belgium, and 1,003 in Ireland. In drawing attention to this disparity the Chief Census Officer argued that the relatively high mortality amongst females was sufficient to account for the difference stated. Then in summarising the causes of this relatively higher mortality he said, "In Europe, boys and girls are equally well cared for. Consequently, as boys are constitutionally more delicate than girls, by the time adolescence is reached, a higher death-rate has already obliterated the excess of males and produced a numerical equality between the two sexes. Later on in life, the mortality amongst males remains relatively high, owing to the risks to which they are exposed in their daily avocations, hard work, exposure in all weathers and accidents of various kinds combine to make their mean duration of life less than that of women, who are for the most part engaged in domestic duties or occupations of a lighter nature. Hence the proportion of females steadily rises. In India, the conditions are altogether different. Sons are earnestly longed for, while daughters are not wanted. This feeling exists everywhere, but it is recognised in some backward parts, particularly in India. With orthodox Hindu marriage is a religious sacrament which cannot be revoked. The Mohammedans allow a man to divorce his wife without any special reason, but he then becomes liable to pay her dower. The permission is seldom acted upon. The Buddhists of Burma regard marriage merely as a civil contract, and either side can annul it. The Hindu law places no restriction on the number of wives a man may have, but most castes object to their members having more than one wife, except for special reasons. A Mohammedan may have four wives, but he also in practice is generally monogamous.

**Marriage Statistics**—In the population of ages and religions, about half the males and one-third of the females are unmarried, 46 per cent of the males and 48 of the females are married, and 5 and 17 per cent respectively are widowed. A reference to the age statistics shows that the great majority of the unmarried of both sexes are very young children, three-quarters of the bachelors being under 15 years of age, while a somewhat larger proportion of the spinsters are under 10, only one bachelor in 24 is over 30, and only one spinster in 14 is over 15. At the higher ages practically no one is left unmarried, except persons suffering from some infirmity or disability, beggars, prostitutes, concubines, religious devotees and mendicants and a few members of certain byegone groups who have been unable to effect alliances of the kind which alone are permitted to them by the rules of their community. It is the persons of the above class-

Amongst communities such as the higher Rajputs clans, where large sums have to be paid to obtain a husband of suitable status and the cost of the marriage ceremony is excessive and those like the Pathans who despise women and hold in derision the father of daughters. Sometimes the birth of a girl formerly female infants were frequently killed as soon as they were born, and even now they are very commonly neglected to the point of early child-bearing must be added to the evils of mortality amongst young 'is an excessive mortality amongst young females, who form the bulk of the population, classes, who often have to work as hard as and sometimes harder than, the men, and they are thus less favourably situated in respect of their occupations than their sisters in Europe. " It is but fair to say that this conclusion has been challenged by many Indian writers, who attribute far greater importance than the Chief Census Officer to the omission of females at the enumeration.

MARRIAGE.

Although recognised in some backward parts, polyandry is now rare in India. With orthodox Hindu marriage is a religious sacrament which cannot be revoked. The Mohammedans allow a man to divorce his wife without any special reason, but he then becomes liable to pay her dower. The permission is seldom acted upon. The Buddhists of Burma regard marriage merely as a civil contract, and either side can annul it. The Hindu law places no restriction on the number of wives a man may have, but most castes object to their members having more than one wife, except for special reasons. A Mohammedan may have four wives, but he also in practice is generally monogamous.

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**Early Marriage**—Another striking feature of the Indian statistics as compared with those of Western Europe is the early age at which marriage takes place. According to M Sandbarts table showing the average distribution by age and civil condition of the people of Western Europe according to the censuses taken about the year 1880, of the population below the age of 20, only one male in 2,147 is married, and one female in 142. In India on the other hand, 10 per cent of the male, and 27 per cent of the female, population below that age are married. The number of males below the age of 5 who are married is small, but of those aged 5 to 10, 4 per cent are married, and of those aged 10 to 15, 1 per cent are married, and of those aged 15 to 20, 1 per cent are married, and of those aged 20 to 25, 1 per cent are married, and of those aged 25 to 30, 1 per cent are married, and of those aged 30 to 35, 1 per cent are married, and of those aged 35 to 40, 1 per cent are married, and of those aged 40 to 45, 1 per cent are married, and of those aged 45 to 50, 1 per cent are married, and of those aged 50 to 55, 1 per cent are married, and of those aged 55 to 60, 1 per cent are married, and of those aged 60 to 65, 1 per cent are married, and of those aged 65 to 70, 1 per cent are married, and of those aged 70 to 75, 1 per cent are married, and of those aged 75 to 80, 1 per cent are married, and of those aged 80 to 85, 1 per cent are married, and of those aged 85 to 90, 1 per cent are married, and of those aged 90 to 95, 1 per cent are married, and of those aged 95 to 100, 1 per cent are married.

The personal life of the deceased is being discussed by many of the participants. Mr. Mahabir opened the camp by giving a short history of the country, its people and the social conditions which holds it back from attaining its place in the world. He then discussed the position of child marriage, one of the leading plagues in its platform. It is, as we have seen, a serious disease, and is being discussed by the Brahmins of the North-Western Provinces. It is a disease which does not only affect the body but also the mind and the soul. It is a disease which is spreading in the country and is being discussed by the Brahmins of the North-Western Provinces. It is a disease which does not only affect the body but also the mind and the soul. It is a disease which is spreading in the country and is being discussed by the Brahmins of the North-Western Provinces.

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It is said that in the United Provinces considerably more than in any other part of the British Presidency. It is said that in the United Provinces considerably more than in any other part of the British Presidency. It is said that in the United Provinces considerably more than in any other part of the British Presidency.

## EDUCATION

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It is possible that this is partly the result of the improved material condition of the lower castes, amongst whom leprosy is most common, and of a higher standard of cleanliness. The greater efforts which have been made in recent years to house the lepers in asylums may also have helped to prevent the disease from spreading. The total number of asylums in India is now 73, and they contain some five thousand inmates, or about 4 7 per cent of the total number of lepers. This may not seem much, but it has to be remembered that the movement is still in its infancy, and that progress has been very rapid in recent years. Comparative statistics for 1901 are not readily available, but it is known that in the two provinces of Bengal and Bihar and Orissa, the number of lepers in asylums was then only about half what it is now. The greater part of the credit for the provision of asylums for these unfortunate persons belongs to the Mission for Lepers in India and the East, which receives liberal help from Government. Its latest report shows that there are 3,537 lepers in the forty asylums maintained by the Society.

### OCCUPATIONS.

The village—Until the recent introduction of western commodities, such as machine-made cloth, kerosene oil, umbrellas and the like, each village was provided with a complete equipment for its own necessities, and was thus almost wholly self-sufficient and independent. Its inhabitants skinned the dead cattle, cured their hides, and made the villagers' sandals and shoes. Local carpenters made their ploughs, local blacksmiths their shares, local potters their utensils for cooking and carrying water, and local weavers their cotton clothing. Each village had its own oil-pressers, its own washer-men, and its own barbers and scavengers. Where this system was fully developed, the duties and remuneration of each group of artisans were fixed by custom and the caste rules strictly prohibited a man from entering into competition with another of the same caste. The barber, the washerman, the blacksmith, etc.

just beginning to appear in India, necessarily presents the sufferer from leprosy in talk. Clear instructions were given to the enumerators to enroll only persons who were congenitally afflicted. Some few, perhaps, may have been included in the return without having lost the power of speech or bearing after birth, but the total number of such mistakes is now very small. In India as a whole 74 males and 53 females per hundred thousand are deaf and dumb from birth. These proportions are much the same as those obtaining in European countries.

**Blindness**—In India as a whole fourteen persons in every ten thousand of the population are blind as compared with from eight to nine in most European countries and in the United States of America. It is a matter of more observation that blindness is ordinarily far more common in tropical countries than in those with a temperate climate. It is, however, less common in India than in parts of Eastern Europe, in Russia, for instance, nineteen persons in very ten thousand are blind.

**Lepers**—In India as a whole 51 males and 18 females per hundred thousand persons of each sex are lepers. Of the different provinces, Assam suffers most, then Burma, and then in order Bihar and Orissa, the Central Provinces and Berar, Madras, Bengal, Bombay, the United Provinces, the Punjab and the North-West Frontier Province. In the two last-mentioned provinces there are only 17 male and 8 female lepers per hundred thousand of each sex. The occurrence of leprosy is very local and its prevalence varies enormously within provincial boundaries.

The number of lepers has fallen since 1891 from 126 to 109 thousand, a drop of more than 13 per cent. When it is remembered that the number of persons suffering from the other three ailments taken together has remained almost stationary, it may be concluded that the decrease in the reported number of lepers is genuine and indicates a real diminution in the prevalence of

Nowhere are the many points of difference in the local conditions of India, as compared with those of western countries, more marked than in respect of the functional distribution of the people. In England, according to the returns for 1901, of every hundred actual workers, 58 are engaged in industrial pursuits, 14 in domestic service, 13 in trade and only 8 in agriculture, whereas in India 71 per cent are engaged in pasture and agriculture and only 29 per cent in all other occupations combined. The preparation and supply of material substances afford a means of livelihood for 19 per cent of the population (actual workers) of whom 12 per cent are employed in industries, 2 in transport and 5 in trade. The distribution of support for 2 persons per mile, the civil and military services support 14, the professions and liberal arts 15, and domestic service 18, persons per mile. The difference due to the extraordinary expansion of trade and industry which has taken place in Western Europe during the last century in consequence of the discovery of the steam engine, and to the great improvement in means of transport and the use of mechanical power in factories of all kinds, which have resulted therefrom. In Germany, sixty years ago, the agricultural population was





force that so far as India is concerned, in spite of the growing number of cotton mills in the Bombay Presidency and elsewhere, the hand industry still, to a great extent, holds its own. Only 13,000 persons are employed in silk spinning and weaving factories, 7,000 in woollen factories including those for the making of carpets and even smaller numbers in other factories of this class. Some of these textile industries are very local. Those connected with jute are practically confined to Bengal, in which province were enumerated. More than half the persons dependent on rope, twine and string making and on working in 'other fibres' chiefly colt, and pinyon fibre were enumerated in Madras and its Native States and a quarter of those supported by wool industries in Hyderabad. Half the silk spinners and weavers are found in two provinces, Bengal and Madras. The dyeing, bleaching and printing of textiles and lace, crape and similar industries are almost unknown in Assam, Bengal, Burma and the Central Provinces and Berar.

**Growth of Industry**—As compared with 1901 there has been a decrease of 6.1 per cent in the number of persons supported by textile industries. This is due mainly to the almost complete extinction of cotton spinning by hand weaving by hand has also suffered severely from the competition of goods made by machinery both in Europe and in this country. There has been a large increase in the number of Indian cotton mills, but as the output per head in factories is far greater than that from hand-looms, the addition of a given number of factory hands involves the displacement of a far larger number of hand workers.

**Hides**—As compared with 1901, a large decline in the number returned as general workers in hides is partly compensated for by an increase in shoe, boot and sandal makers. In the two heads taken together there has been a drop of about 6 per cent. During the same period the number of hide dealers has more than doubled. Owing to the growing demand for hides in Europe and America and the resulting high prices, the export trade in hides has been greatly stimulated. The local cobbler, on the other hand, having to pay more for his raw material and feeling the increasing competition of machine-made goods has been tempted to abandon his hereditary craft for some other work in factories of various kinds.

**Woodworkers**—Wood cutting and working and basket making support 2.6 and 1.3 million persons, respectively, or 3.8 million in all. The number of factories devoted to these industries is still considerable. Saw mills and timber yards each employ some 12,000 persons and carpentry works about 5,000. There is only one cane factory with 46 employees.

**Metal workers**—The workers in metals are only about half as numerous as those in wood and cane. About three-quarters of the persons in this order are general workers in iron, and one-seventh are workers in brass, copper and bell-metal. The total number of persons dependent on metal industries shows a decline of 6 per cent as compared with 1901.

**Earthenware**—The manufacture of glass, bricks, and earthenware supports in all 2.2 million,

and of these the great majority were employed in the gold mines of Kolar, where for some years past the value of the gold produced has been about £2,000,000 per annum. The mines in the Central Provinces and Berar, which support 21,000 persons, are principally for the extraction of manganese. The mining of this ore was greatly fostered by the Japanese War, which caused Russia to discontinue her exports of it for the time. There has since been a period of depression, which seems now to have come to an end. Manganese is extracted elsewhere also, e.g., in Mysore and Madras. In Burma tin and lead are extracted as well as silver and wolfram in small quantities. Iron ore is worked in various places, but chiefly in Mayurbhanj which supplies the raw material for Messrs Tata and Company's ironworks at Sakchi.

Of the 75,000 persons supported by work in quarries and mines for non-metallic minerals, other than coal and salt, two-fifths were enumerated in Bombay, where the quarrying of stone and limestone is an important business chiefly in the neighbourhood of Bombay city. In Bihar and Orissa and Madras mica mining is of some importance.

The extraction of salt and saltpetre supports 78,000 persons. Nearly a third of the total number are found in Bihar and Orissa, where the Nujyas are still largely employed in digging out and refining saltpetre. This industry is carried on also in the Punjab. Rock salt is mined in the same province and in Rajputana. The total number of persons employed in the extraction of minerals has risen during the decade from 235 to 517 thousand. The most noticeable increase is in Coal mines and petroleum wells which embrace nearly three times as many persons as in 1901. The bulk of the increase has occurred in Bengal and Bihar and Orissa, but it is to be noted that Hyderabad and the Central Provinces and Berar which now contribute about 12,000 persons to this group gave practically none ten years previously. Almer for metals are 2.7 times as numerous as they were in 1901.

**Industries**—Of the 35.3 million persons dependent on industrial occupations, nearly one-fourth, or 2.6 per cent of the total population, are supported by textile industries. Of these, the most important, from a numerical point of view, are industries connected with cotton spinning, sizing and weaving. The number of persons supported by cotton spinning, sizing and weaving is close on 6 millions, and another half million are employed in spinning, cleaning and pressing the raw material. The proportion of the population supported by cotton spinning, sizing and weaving is 37 per mille in the Punjab, 29 in Bombay and Rajputana, 27 in Madras, 22 in the Central Provinces and Berar and 18 in the United Provinces. In it is much smaller, ranging only from 8 to 11 per mille. Bihar and Orissa, Bengal and Assam are supported by rope, twine and string making, and more than a third of a million by jute spinning, pressing and weaving. Other important textile industries are wool spinning and weaving, silk spinning and dyeing and printing, etc., each of which supports from a quarter to a third of a million persons. It is clear there-





# Prices and Wages

In the section on the trade of India (p. 243) but reference is made to the course of prices and wages. The subject was further analysed in the official volume on Prices and Wages in India published during the year. The salient points of this report are indicated in the following extracts—

Before analysing the rise of prices in 1913, it is convenient to summarise the general movement of prices for the last two decades. The general level of wholesale prices is now 40 per cent higher than it was two decades ago. In 1912, the general average was 41 per cent higher than in the quinquennial 1890-94. If a smoothed average be taken, say the quinquennial 1908-12, the rise was 37 per cent higher than during the quinquennial 1890-94. This rise has been especially marked since 1905. The increase in price has been greatest in the following classes of articles: Hides and skins, food grains, building materials and oils, all of which have risen 40 per cent or more above the level of the period 1890-94. It is not resting also to note that the rise has been greater in some areas than in others. If the average of 1905 to 1912 be taken the rise has been above 30 per cent in the following areas as compared with basic period of 1890-94: Karnataka (43 per cent), Bundelkhand (39 per cent), the Punjab East (36 per cent), Punjab (35 per cent), the United Provinces (41 per cent), Sind (35 per cent), the Punjab East (36 per cent), Punjab (35 per cent), the United Provinces (38 per cent), the United Provinces and Berar (35 per cent), Bengal (36 per cent), Madras (35 per cent), and Gujarat (31 per cent).

On the other hand, the rise has been comparatively small in Assam, which is practically free from famine. The rise at the ports except Karachi has been less than in most of the up-country areas, but in comparing the ports with prices elsewhere it should be borne in mind that at the ports were generally higher than in other areas and that an equal rise in prices would result in a lower percentage of rise at the ports. The prices at the ports do not fluctuate within such wide limits as those in up-country areas, such as Bundelkhand. The disparity also between the prices in good and bad years is remarkable, but with the linking up of markets in railways, the variations between districts and districts are now very much less than they were formerly.

**Upward Trend**—The marked upward tendency in the prices of Indian products in the world markets continued in 1913. Jute rose 15 per cent, arhar dal 14 per cent, shoe and tobacco leaf 10 per cent, poppy seed and madder 9 per cent, rice and gram 8 per cent each, barley 5 per cent, wheat and rapeseed 3 per cent each and ragi 1 per cent.

## WAGES IN 1913 AND 1914.

The statistics of wages of skilled and unskilled labour paid in districts of British India for 1913 are not now available, as the half-yearly returns of wages submitted by district officers have been discontinued and a general census, the first of which was instituted in 1911-12 was suspended in price of labour in 1913-14. In wages in the industries of cotton (Bombay), woolen (Calcutta), jute (Bengal), paper (Bengal), rice (Assam), and mining (Bengal), and brewing (Punjab), it has been found as shown below that there has been a general rise in wages in these industries.

**Retail Advance**—There was also a general rise in the retail prices of food-grains in India in 1913 as compared with 1912, the highest rise being in the prices of arhar dal (10 per cent) and the lowest in Ragi (*Eleusine coracana*) (2 per cent). Bajra (*Pennisetum typhoides*), however shows a fall of 7 per cent and Jawar (*Andropogon sorghum*) 1 per cent. The average fluctuation for all India in the prices of food-grains was a rise of 3 per cent over the price of 1912. There was no fluctuation in the average price of maize and salt in India.

**Wage-earners' benefit**—The general conclusions show that the income of wage earners has generally increased considerably faster than their cost of living, which has resulted in a substantial improvement in the material condition of agricultural and general labourers and artisans who form the majority of the wage-earning class. Taking India as a whole, the rise in real wages of general labourers has been greatest in the Punjab East, Agra Provinces, East and Bundelkhand. Next to this class the rise in real wages in India as a whole has been greatest in the case of village artisans. The rise has been highest in the Punjab East, Bundelkhand, Bihar and Agra Provinces, North and West. The third class in order of rise for all India is the agricultural labourer. The rise in real wages for this class has been above 50 per cent in the Punjab East, Agra Provinces, East and Chota Nagpur, between 40 and 50 per cent in Agra Province North and West, Punjab West, Bundelkhand, Berar and Madras South. Next in order of importance come, firstly, the artisans employed in urban areas other than large cities, secondly, general labourers in cities and thirdly, the city artisans. In India, as a whole, the rise in real wages has been lowest for domestic servants both in cities and other urban areas and as a matter of fact in some circles there has been an actual fall in real wages, that is, the rise in nominal wages has not been so great as that in the cost of living. To sum up it may be said that in India, unlike most other countries, the rise of prices has been fully met by a rise in wages in the case of skilled or unskilled labourers, not employed in industries or on railways, and industrial or railway labourers have, in some parts of India, secured an increase in wages comparable with the rise in prices while in other parts of India, such an increase has been smaller than the increase in their cost of living. It is, therefore, in these latter areas that industrial and railway labourers have not profited by the rise in prices and in this respect they are therefore similar to those on fixed incomes, such as professions and solely from shares and other securities.

1 per cent in January 1914 is compared with January 1913 —

Rate for January 1914 expressed in index numbers (rate for January 1913 = 100)

Industry —

Cotton 100

Wool 109

Jute 102

Paper 100

Rice 96

Mining (Coal) 97

Brewing 108

General average 103

The greatest rise is a rise of 9 per cent each in the cotton industry in Bombay and in the woollen mills in Upper India. The insull-clency of operatives in the cotton factories in Bombay has been a serious hindrance to the

Industry, and is due to the great demand for unskilled labour elsewhere, chiefly in the Public Works Department and at the docks, and also to such root factors over long periods as plague, etc., which arrest the natural growth of the population at a time of considerable industrial expansion. The jute industry shows a rise of 2 per cent. In the early part of the season, labour was fairly plentiful. In the beginning of the hot weather the jute mills started a five day week and the exodus of labourers, homes was in consequence even larger than in previous years. The paper industry in Bengal records no change, while the coal industry shows a fall of 3 per cent. The rice milling industry in Rangoon also shows a slight fall of 4 per cent. There was no material change in the garden, where labour conditions remained on the whole the same as in previous year. The table below gives the rates for the past three years for different class of wage earners in the chief industries —

## Average rates of wages paid in selected industries

Industries		Per	1912		1911		1914	
(1) Cotton	Month	Rs 1 p	15 7 4	15 8 10	17 3 8	17 14 9	19 12 0	51 2 0
	Week	Rs 1 p	16 2 0	15 1 6	15 14 11	17 14 9	19 12 0	51 2 0
(2) Wool	Month	Rs 1 p	15 9 0	16 9 7	17 14 9	19 12 0	51 2 0	51 2 0
(3) Paper	Month	Rs 1 p	15 9 0	16 9 7	17 14 9	19 12 0	51 2 0	51 2 0
(4) Rice	Month	Rs 1 p	15 9 0	16 9 7	17 14 9	19 12 0	51 2 0	51 2 0
(5) Brewing	Month	Rs 1 p	15 9 0	16 9 7	17 14 9	19 12 0	51 2 0	51 2 0
(6) Jute	Month	Rs 1 p	15 9 0	16 9 7	17 14 9	19 12 0	51 2 0	51 2 0
(7) Mining (Coal)	Month	Rs 1 p	15 9 0	16 9 7	17 14 9	19 12 0	51 2 0	51 2 0
(8) Coal	Act coolies	Month	4 15 5	4 12 8	5 0 0	5 0 0	5 0 0	5 0 0
	Non act coolies	Month	4 1 0	4 1 5	4 3 7	4 3 7	4 3 7	4 3 7
{ Average		Month	4 6 9	4 5 11	4 8 8	4 8 8	4 8 8	4 8 8

The importance of these industries may be gauged from the statistics of the last census (1911) which show that on the date of the census there were 704,000 employed on tea gardens, 308,000 in cotton mills, 222,000 in other textile industries, and 143,000 in collieries. The rise in the wages of industrial labour has not been so great as in the case of agricultural labourers and village artisans. Money wages of industrial labourers, however, have over long periods increased in all industries and the rise has generally been greater than or equal to the rise in retail prices except in the tea, sugar and brewing industries.

# Indian Education.

Western thought, and (2) the obvious utility of a system whose object should be, in part at least, to assist Indians to a development of their capacities and sympathies on lines which might be of service in the actual government of the country.

With reference to this last point the following consideration may be urged. The object of our great Universities and Public Schools in England is generally admitted to be something more than the satisfaction of purely theoretical interest. They are meant to be the training ground for capable public servants. Let us once admit this to be a necessity in England, if then we recognize the impossibility of administering the great Indian Empire through Englishmen alone, it follows that there is nothing in Indian History or Education which is not valuable for public service. It is a training for public service which should be applied to the Indian mind.

And a second reason for turning to India seems to be no adequate reason for turning to Europe. The same method of education which is applied to the Indian mind is applied to the European mind. The same system of education which is applied to the Indian mind is applied to the European mind. The same system of education which is applied to the Indian mind is applied to the European mind.

Let the doubt be solved and the task of Indian Education may be said to resolve itself into a doubt which of the two policies is preferable. Let the doubt be solved and the task of Indian Education may be said to resolve itself into a doubt which of the two policies is preferable.

English education becomes in the initial stage of explaining one or showing how the initial condition as to the part of British rulers or Oriental learning did not so much begin education as to the desire for education until at last the Government undertook the duty of guiding such aspirants. To this end one aim will be to show (1) Indian education in the stage of conception and its birth somewhere about the time of Muhammad, (2) its growth and originality, (3) its present situation.

## THE BIRTH OF INDIAN EDUCATION

General's Council in 1853 that it was definitely discussed whether it might not accord with the meaning of the Act of 1813 to use at least part of the money for the encounter with the study of English. In 1817 the Government of India had already at Calcutta with the object of instructing the students of Hindu College was opened at Calcutta in 1817. The expression "English" being a sign of the most prominent position. The moving spirit of the foundation of this institution was Raja Ram Mohan Roy who in the words of Sir H. H. James in his important book "Education and State-ship in India," "incarnates the impulse which led to the management of Sanskrit and Arabic, and was interpreted as a scheme for the improvement of the sciences in the British territories of India." It was not till the famous meeting of the Gov-

ernor General's Council in 1853 that it was definitely discussed whether it might not accord with the meaning of the Act of 1813 to use at least part of the money for the encounter with the study of English. In 1817 the Government of India had already at Calcutta with the object of instructing the students of Hindu College was opened at Calcutta in 1817. The expression "English" being a sign of the most prominent position. The moving spirit of the foundation of this institution was Raja Ram Mohan Roy who in the words of Sir H. H. James in his important book "Education and State-ship in India," "incarnates the impulse which led to the management of Sanskrit and Arabic, and was interpreted as a scheme for the improvement of the sciences in the British territories of India." It was not till the famous meeting of the Gov-

## GROWTH AND ORGANISATION OF ENGLISH EDUCATION IN INDIA.

Indians to desire and work for English Education. From that time forward the far-sighted observer must have realised that a movement had begun which whether we would or not we could no longer check. The same phenomenon was witnessed on the Western side of India, and Montagu's *Diaphanous* (dated March 1824, describes particularly notice for its recognition of the necessity of introducing a knowledge of European sciences into any scheme of education as well as for its wise restraint in dealing with Oriental learning. For though his declared object was to establish English schools and encourage the natives in the pursuit of European sciences, he repudiates the idea that the purely Hindu side of education should be totally abandoned. In his own words "It would surely be a preposterous way of adding to the intellectual treasures of a nation to begin by the destruction of its indigenous literature, and I cannot but think that the future attainment of the natives will be increased in extent as well as in variety by being, as it were, engrained on their own previous knowledge and imbued with their own original and peculiar national matters was sufficiently appreciated by the citizens of Bombay who in 1827, the year of his departure, resolved to found two professorships in his memory." "to be held by gentlemen from Great Britain until the happy period when natives shall be fully competent to hold them." It is sufficiently clear not only that an interest had been aroused in English education but that some attempts had been made to meet the interest before 1825, though Lord Curzon may have given a just estimate of the situation at the Educational Conference of Simla in 1891 when he said "Education there was, but it was narrow in its range, exclusive and spasmodic in its application, religious rather than secular, theoretical rather than utilitarian in character. Above all, it wholly lacked any scientific organisation and it was confined to a single sex."

It is, of course, just the possibility of grafting modern western knowledge on the old Indian stocks that is open to doubt. Here lies the significance of Montagu's famous tirade on Oriental science, which deserves quoting for the contrast it forms to the juster estimate of Montagu's *Diaphanous*. It is perhaps more offensive to Indian ears for the element of truth it contains, though the entirely unsympathetic form in which he expresses himself. "The question before us," he writes, "is simply whether, when it is our power, to teach languages in which, by universal confession, there are no books on any subject to be compared to our own, whether, when we can teach European science, we shall teach systems which, by universal confession, differ they differ from those of Europe, differ for the worse, and whether, when we patronise sound philosophy and true history, we shall countenance at the public expense, medical doctrines which would displace, in English history, astronomy which would be taught in the girls at an English boarding-school, history abounding with kings' lofty feelings and religious thirty thousand years, and geography made up of seas of treacle and seas of butter." The reiterated phrase "by universal confession" is beyond the mark, but always was surely right in his valuation of ancient Hindu science as science or history, *us history*. Where he was surely wrong was in his implied condemnation of Indian literature as *literature*. From that point of view you might just as well condemn Homer for in 1852 the numbers under instruction in Government colleges amounted to 25,372 of which 9,888 were for English education (James p 34). The increase of numbers must have been materially affected by a Resolution of Lord Hardinge's Government in 1844 in which it was stated that in the selection of candidates for public employment, preference would be given to those who had been educated in the newly-fashioned type of institution. An adherent of the old-fashioned intellectual ideal of college

### Universities Established

Macaulay's period of service on the Committee of Public Instruction (first formed in 1824) gave considerable impetus to the movement he advocated, as figures will show. Whereas the Committee had no more than four institutions under its control in Bengal when he joined it, this number was more than trebled by the end of 1837, the larger part being Anglo-Vernacular schools or colleges. Progress continued along these lines in Bengal, and more slowly in other Presidencies, until in 1852 the numbers under instruction in Government colleges amounted to 25,372 of which 9,888 were for English education (James p 34). The increase of numbers must have been materially affected by a Resolution of Lord Hardinge's Government in 1844 in which it was stated that in the selection of candidates for public employment, preference would be given to those who had been educated in the newly-fashioned type of institution. An adherent of the old-fashioned intellectual ideal of college

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## Statement of Educational Progress in INDIA

13

	1908 09	1909 10	1910 11	1911 12	1912 13	1913 14
Area in square miles	1,144,107	1,145,728	1,152,801	1,155,513	1,157,686	1,157,686
Population	123,249,836	122,699,630	130,114,723	130,408,551	130,702,188	130,702,188
{ Male	119,570,460	119,017,058	124,700,803	124,000,002	124,851,633	124,851,611
{ Female	242,850,305	241,717,688	254,820,916	255,308,553	255,153,821	255,153,821
Public Institutions for Adults	123	128	128	130	128	138
Number of arts colleges	1,174	1,100	1,203	1,219	1,273	1,349
Number of high schools*	100,320	107,403	108,144	110,602	113,955	110,650
Public Institutions for Adults						
In arts colleges	18,788	22,012	24,806	29,369	32,031	38,830
In high schools*	316,005	344,047	364,704	390,881	428,182	468,186
In primary schools	3,786,402	3,888,071	3,936,450	4,202,631	4,428,531	4,608,405
Percentage of male scholars in public institutions to male population of school-going age	25.16	26.2	26.34	26.8	28.4	29.8
Public Institutions for Females						
Number of arts colleges	7	8	8	10	10	11
Number of high schools*	124	125	130	135	144	157
Number of primary schools	11,511	11,753	12,027	12,866	13,694	14,722
Female Scholars in Public Institutions						
In arts colleges	185	217	244	270	318	353
In high schools*	13,054	14,557	14,864	16,884	18,515	21,095
In primary schools	631,006	608,636	680,471	785,511	832,002	909,766
Percentage of female scholars in public institutions to female population of school-going age	4.0	4.2	4.24	4.7	6.0	6.4
For V. Schools in public institutions						
{ Male	4,630,134	4,829,554	4,030,084	5,253,065	5,550,541	6,823,215
{ Female	729,342	763,680	793,046	876,060	928,983	1,019,621
Total	5,370,476	5,590,134	5,723,730	6,128,725	6,488,824	7,842,836
For V. Schools in public institutions						
{ Male	5,072,204	6,203,305	6,346,582	6,780,721	7,149,065	7,518,147
{ Female						
Total						
For V. Schools in public institutions						
{ Male	2,12,432	2,34,330	2,42,08	2,69,59	3,39,25	3,04,54
{ Female	1,17,224	1,02,224	1,00,82	1,05,80	1,23,08	1,47,01
Total	24,27	24,50	28,00	29,84	33,28	37,07
For V. Schools in public institutions						
{ Male	3,53,03	3,61,10	3,70,40	4,05,23	4,05,61	5,50,11
{ Female	1,09,37	1,85,42	2,00,40	2,10,09	2,40,62	2,60,44
Total	1,35,18	1,40,24	1,47,01	1,01,01	1,05,06	1,85,40
From other sources						
{ Male	6,58,48	6,80,70	7,18,08	7,55,93	9,02,09	10,02,24
{ Female						
Total						
Grand Total of Expenditure						

\* High schools include vernacular high schools also in some provinces.  
 † The percentages for 1910-11, being reckoned on the new Census figures are slightly misleading for purposes of comparison with previous years.  
 ‡ This remark applies throughout all the Tables.

It would see in this Resolution a fatal concession to the utilitarian view and a fatal misdirection of public attitude towards education

Meanwhile educational institutions had so multiplied throughout India that the time was becoming ripe for the decisions arrived at in Sir Charles Wood's Despatch of 1854. The old idea had been that the education imparted to the higher classes of society would gradually "filter down" to the lower classes. How little true it is that education could ever filter down to the masses in India by its own percolative properties is evident enough even now when our wide system of schools entirely fails to touch the majority of India's population. The Despatch of 1854 marks a departure from the "attrition" policy and a recognition on the part of an enlightened Government of educational duties, even towards sections of the population who had never entertained the idea of Government obligations in their direction. The result of the Despatch was the formation of Departments of Public Instruction on lines which do not differ at all essentially from Departments of Public Instruction of the present day. They represent a direct desertion of the *laissez faire* or *filtration* policy, and an attempt on the part of the Government to "combat the ignorance of the people which may be considered the greatest curse of the country." Another feature of the Despatch was an outline of a "University" system, which formed the basis of the scheme adopted in 1857 when Acts were passed for the incorporation of three Universities, one for Calcutta, one for Bombay and one for Madras. As Lord Curzon said "The Indian Universities may be described as the first fruits of the broad and liberal policy of the Education Despatch of 1854." He might have gone further and said that the scheme outlined in it not only originated Universities but contained suggestions for their proper conduct whose value has only recently been understood. In its proposal of a distinction between "common degrees" and "honours" degrees it anticipated the actual procedure of at least one University, that of Bombay, by nearly sixty years.

### Private Agencies

The Despatch of 1854 and the orders based on it, together with later resolutions and modifications, organized education into something like the present system. Government took the whole thing into its own hands and established Universities, colleges, high schools and middle schools. Efforts were made to extend elementary education so as to reach the masses and also to establish a system of inspection with a view to guaranteeing the efficiency of private institutions which should be allowed grants-in-aid as well as Government Institutions themselves. Expansion under control sums up the aims of this combined system of grants-in-aid and inspection as all James put it. "Local management perhaps, in large measure, to supersede direct management by Government." (p. 48) The latter part of the sentence may have been the

### Great Expansion

The period from 1882 to the beginning of the new century is one of phenomenal expansion and no proper regard was paid to the standard or quality of the product. It is this period which any deservers the opprobrium incurred by education in India. And it is the universities which stand out as the chief sinners. There can be no reasonable doubt that students were being turned out with degrees attached to their names who could not be regarded as educated from any respectable standpoint. As a man who is doubtful whether an act of his really is so praiseworthy as the general chorus of congratulation had led him to suppose, suddenly, with tremors at the thought of the revolution of opinion that is sure to follow if he turns out to have done wrong, feels that wrong with the seemingly excellent product of the Despatch of 1854 and the Commission finally it invaded the sphere of Convocation addresses. At last in 1901 the Vice-Chancellor of the University of Calcutta made this statement: "For the first time, the Chancellor asks the University to consider the possibility of constitutional reform." In September of that year an educational conference was convened at Simla by the Viceroy Lord Curzon. In 1902 the Indian Universities Commission was appointed and in 1904 an Act was passed to amend the law relating to the Universities of British India.

Inspiration of the Commission or 1902 appointed to inquire into the way in which the recommendations of the Despatch of 1854 had been carried out. The result of the Commission was to relax the control exercised by Government over education. Government's withdrawal was intended to refer only to secondary instruction. The idea was to encourage private enterprise in the founding of secondary schools. But though the recommendations of the Commission included much talk of conditions and cautions and of the necessity of maintaining a high standard, the addition of a further recommendation that the managers of aided schools and colleges be permitted, if they wished, to charge fees less than Government schools of the same class led in the result to a general deterioration of standard. The recommendations of this Commission appear to some as a charter of inefficiency. They are the avenue to educational institutions run as a business proposition. Meanwhile perhaps the most creditable feature of the Commission's Report was its insistence on the importance of Primary Education and its recommendation that primary education be declared to be that part of the whole system of Public Instruction which possesses an almost exclusive claim on local funds set apart for education and a large claim on provincial revenues. The least creditable feature is its recommendation, "that preference be given to that system which regulates the aid given mainly according to the results of examination." To pay by results is willingly to encourage the cramming to the results of examination. "To pay by results is willingly to encourage the cram-

# Statement of Educational Progress in MADRAS

	1908-09	1909-10	1910-11	1911-12	1912-13	1913-14
Area in square miles						
Population						
Male { Female						
Total Population						
Public Institutions for Males						
Number of arts colleges	32	30	30	30	20	34
Number of high schools	160	172	172	108	171	176
Number of primary schools	22,412	23,108	23,426	24,044	25,223	26,018
Male Scholars in Public Institutions						
In arts colleges	4,227	3,911	3,709	4,893	5,401	7,028
In high schools	66,180	72,673	69,643	71,904	77,681	86,364
In primary schools	680,817	739,033	766,884	820,331	889,303	952,035
Percentage of male scholars in public institutions to male population of school-going age	27.8	30.8	20.7	30.8	33.1	35.7
Public Institutions for Females						
Number of arts colleges	1	1	1	2	2	2
Number of high schools	32	31	32	33	32	35
Number of primary schools	862	886	940	1,162	1,281	1,443
Female Scholars in Public Institutions						
In arts colleges	38	37	32	46	60	66
In high schools	4,981	4,212	4,027	4,610	4,080	5,401
In primary schools	135,784	147,010	150,027	190,710	223,835	248,211
Percentage of female scholars in public institutions to female population of school-going age	5.8	0.2	0.1	0.0	7.4	8.2
Total Scholars in public institutions { Male Female						
Total	813,056	870,505	890,701	943,309	1,011,753	1,095,518
Total Scholars in public institutions { Male Female	108,167	181,461	190,801	200,617	234,107	269,706
Total	981,223	1,051,966	1,087,502	1,152,880	1,245,860	1,365,654
Total Scholars in public institutions { Male Female	1,090,016	1,178,018	1,215,725	1,280,005	1,302,182	1,400,045
Expenditure (on thousands of rupees)						
From provincial revenues	27.50	39.07	43.16	44.22	58.20	65.60
From local funds	20.91	11.15	11.24	12.28	17.27	(a) 23.94
From municipal funds	3.81	5.17	3.21	3.15	1.15	(b) 6.63
Federal Expenditure from public funds	62.54	65.60	67.01	69.05	79.62	9.26
From fees	2.60	11.80	17.29	37.00	41.11	40.00
From other sources	32.17	10.81	12.78	38.10	36.56	38.07
Total of Expenditure	1,71,141	1,19,10	1,27,08	1,30,05	1,67,62	1,70,40

\* Includes contribution of Rs. 1,647,901

(b) Includes provincial contribution of Rs. 1,62,009

# UNIVERSITIES ACT AND PRESENT SITUATION.

To quote from the Fifth Quinquennial Review—“the Colleges have defied rights of representation on the Syndicate, to this extent that a number not falling short by more than one of a majority must be heads or professors or colleges. One University has required by its regulations that a majority of the elected members of the Syndicate shall be heads or professors of Colleges.” It is evident then that the working bodies in the Universities have been cleaned up and are now so constituted as to contain the obviously essential educational element.

## Policy of 1913

The influence of Lord Curzon on educational progress has been generally salutary. For though his reforms had the air of restriction and raised a general outcry in India—“the deliberate attempt to throttle higher education in India”—it is now recognised by enlightened thinkers that all promises of educational revival have been given before any quantitative increase took place, it was necessary to reform the qualitative basis. A glance at the work done is summarised by the last Quinquennial Review will show how the machinery has been cleaned. The Universities are now respectable, secondary schools have been improved and placed under stricter conditions of recognition, attention, though insufficient, has been paid to the training of teachers in primary schools examinations have been simplified, buildings improved, the pay of teachers raised, the courses of studies revised and widened. In these circumstances the Government Resolution of 1913 was justified in its aims to extend educational institutions on every side. It proposed to double the number of primary schools (a scheme which may be regarded as a compromise between the policy of *laissez faire* and that of compulsory education), and to encourage the establishment of a greater number of second-ary schools on the lines of private enterprise by increased grants on conditions of submission to Government inspection, recognition, and control. One of the most interesting features of the Resolution is Government's desire to develop the hostel system. In the words of the Resolution, “The Government of India desire to see the hostel system developed until there is adequate residential accommodation attached to every college and secondary school in India.” Altogether the Resolution is a notable pronouncement, ranging as it does over every conceivable aspect of higher education, with a depth of insight and a readiness to face the most complex problems of finance and organisation that augurs well for educational progress. There is reason to hope that our educational system in India will stand out as one of the most remarkable achievements in the history of imperial politics.

## University Organisations

These Universities are examining bodies with colleges affiliated to them. The Gover-

The Commission of 1882, which favoured the policy of withdrawing higher education from the control of Government within certain limits and of allowing colleges and secondary schools conducted by private enterprise to reduce their fees, though in many details it led to a general inefficiency and lowering of standard in higher education. In some matters it anticipated all that has hitherto been done. For example, in suggesting that there should be two sides in secondary schools, “one leading to the entrance examination of the Universities, the other of a more practical character, intended to fit youths for commercial and other non-literary pursuits,” it still anticipates Government action by many years. The Universities Commission of 1902 proposed to make the School Final examination a preliminary test for certain professions and posts in Government service and to substitute it for the Bachelorship as a general qualification, even, if possible, as a test of fitness to enter the University. The latest statement of Government policy (dated Feb. 1913) re-asserts and emphasises these proposals, which are in attempt to enforce the suggestion of the Commission of 1882. But the general relaxation of Government control seemed to Lord Curzon the radical evil of his day.

## New Senates

Not to speak of the lowering of efficiency and colleges by private enterprise, we may mention among the more glaring defects which Lord Curzon had to face the maladministration of the Universities due to the mistake of their composition. All kinds of people had except into the Senates of Universities who from the true educational point of view had no business there. The numbers had become unwieldy so that it was impossible to get passed even necessary reforms. The progress of education was retarded and modern innovations simply ignored. As reconstituted the Universities have reversed their regulations and though they have not ceased to be examined universities they have taken upon themselves the necessary function of inspection. Little has yet been done to make them that, but it may be judged from utterances in their Senates that they are becoming increasingly conscious of their possibilities or duties in this direction. In the last Resolution on Education (Feb. 1913), it was decided that the principle of an examining and affiliating University must still be maintained. Nevertheless a movement is proceeding in the direction of new local teaching and residential Universities within each of the provinces in harmony with the best modern opinion as to the right road to educational efficiency.” Under the present system it is no longer impossible to pass radical changes. The Senate of each University has been reduced to one hundred or less in number, and the Act lays down that in the election of members of the Syndicate, the executive body in the University, a certain number of those actively engaged in educational work should be selected.



nor-General is the Chancellor of the University to control the work of a particular subject The Faculties are in most cases those of Arts, science, law, medicine and engineering. There is an official faculty in the Punjab University alone Each of the main branches of study in a University is represented in addition by a Board of Studies, that is, an advisory body whose duties are to look after the curricula and recommend text books or books which represent the standard of knowledge required in the various examinations The Senate as a whole consists of from 75 to 100 members, the majority of whom are nominated by Government, the remainder being elected by the Senate or its faculties or by the body of graduates of the University

*Constitution*—There are in British India five Universities with the following territorial limits (Sixth Quinquennial Review, p 207) —

Territorial Limits	Province (including any Native State under its political control and any foreign possession included within its boundaries)	University
Bengal, Burma, Assam, Bihar and Orissa	United Provinces of Agra and Oudh, the Central Provinces (including Benar) and Ajmer-Merwara	Calcutta
Madrass and Coorg	Bombay and Sind	Bombay
Hyderabad, Mysore and Baroda	The States included in the Rajputana and Central India Agencies	Allahabad
Kashmir and Baluchistan	Punjab, North-West Frontier Province and British Baluchistan	Punjab

The Matriculation Examination is the test for entrance to a University After matriculation, if the student decides to graduate in Arts, he must take a four years' course After two years he takes the Intermediate Examination After another two years he may appear for the Examination for Bachelor of Arts The regulations with regard to Honours vary in the different Universities In Calcutta the honours and pass courses are separate In Bombay the honours student takes in addition to the pass course The degree in Master of Arts requires a further examination (except in Madras) which is taken one or two years after the examination for the B A degree If the student elects to take science, his course is one of four years In some Universities he receives the degree of B A, in others a separate degree of B Sc Where the separation between Arts and Science is clearly defined, the student takes the Intermediate examination in Science two years after Matriculation, and two years after this examination appears for that of B Sc Those students who choose a professional course, e.g., agriculture, and two years after this examination appears for that of B Sc

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One of the most interesting features of the last Government Resolution on education is the decision to found a teaching and residential university at Dacca Government also professes themselves willing to sanction under certain

Dacca University.

But it should be remembered that in some universities the Arts degree is given for Science subjects

One of the most interesting features of the last Government Resolution on education is the decision to found a teaching and residential university at Dacca Government also professes themselves willing to sanction under certain

The annual output of graduates is reckoned in the Sixth Quinquennial Review at 2742, and the proportion of students who graduate in the four main faculties is given as follows —

Arts	85%
Science	20%
Medicine	9%
Engineering	4%

# Statement of Educational Progress in BENGAL

	1908-09	1909-10	1910-11	1911-12	1912-13	1913-14
Area in square miles						
Population	Male Female Total Population	124 492 26 124,826 26,543,048	124 492 27 430,187 27 557 153	No change	78,609 23,463,225 22,117,852	No change
Public Institutions for Males		52,669,800	55 028 340		45,483,077	
Number of arts colleges	29	20	20	20	31	31
Number of high schools	397	396	399	398	532	570
Number of primary schools	84 480	35,201	35,437	36,342	28,107	27,470
Male Scholars in Public Institutions						
In arts colleges	4,613	7,107	8,251	9,635	12,791	14,693
In high schools	82,822	87,172	94,614	103,090	104,214	182,648
Percentage of male scholars in public institutions to male population of school-going age	908,939	892 10.32 0	897,953	1,047,769	990,110	982,010
Public Institutions for Females						
Number of arts colleges	2	3	3	3	3	3
Number of high schools	17	17	21	10	21	23
Number of primary schools	3,029	3,091	3,052	3,124	0,708	7,088
Female Scholars in Public Institutions						
In arts colleges	42	47	68	81	105	113
In high schools	1,074	2,046	2,301	2,423	3,080	3,638
Percentage of female scholars in public institutions to female population of school-going age	139,904	145,233	149,223	158,616	205,784	210,137
ORAL SCHOLARS in public institutions						
Male	1,308,718	1,354,014	1,290,621	1,364,946	1,435,452	1,452,353
Female	159,562	167,505	173,507	189,971	227,315	235,434
Total	1,368,280	1,422,410	1,464,128	1,554,917	1,662,765	1,687,787
ORAL SCHOLARS (both male and female) in all institutions	1,421,389	1,475,376	1,518,239	1,609,360	1,718,623	1,724,608
Expenditure (in thousands of rupees)						
in Provincial revenues	49 79	49,03	50 10	54,76	64,07	64,99
in Municipal funds	11,56	11,36	11,64	11,64	15,88	22,23
Expenditure from public funds	1,32	1 41	1,53	1,70	1,56	1,70
and Total of 1 and 2	62 67	62,70	63 38	68,10	82,41	88,92
	52,71	56 19	61,02	67,88	86,62	95,60
	29,20	32 00	36,31	36,04	33,08	36,35
	1,44,58	1,50,89	1,60,71	1,72,02	2,02,71	2,20,77

conditions the establishment of similar universities as occasion may demand. An act passed by the Imperial Council this year. These experiments may be regarded as an attempt to get away from the abbatting and examining type of University and to conform to that ideal of a University which requires it not only to confer degrees but to supervise the training of intellect and character as closely as possible. A University of this type will turn out graduates who may be trusted to have in their degree satisfactory credentials about their general character and ability. Under the existing system the University turns out graduates of whom it knows absolutely nothing beyond what it learns in examinations.

### Colleges

Affiliated to the University are colleges which the University have power to inspect and regulate. In 1913-14 the number of colleges affiliated to the Indian Universities is given as 186, of which 149 are Arts Colleges, 21 Law Colleges, four Medical, four Engineering, three Agricultural, one Commercial, and thirteen Teachers' Training Colleges. The number of students in Arts Colleges was 39,189, and in all Colleges 47,229. All colleges, whether under Government or private management, are inspected by the Universities. Colleges receive financial aid from public funds, both provincial and Imperial. Under the Universities Act the Universities are empowered to make regulations about the residence of college students. The rule now is that students who do not reside with parent or guardian must reside either in a boarding house under supervision or in an approved lodging house. The result has been a larger provision of college residential buildings. The hostel system is definitely encouraged by Government and in the latest Resolution (Feb 1913) Government express the desire to see the hostel system extended to all colleges and secondary schools. The number of female students was 353.

### Schools

Government policy with regard to schools has been to provide a small number of institutions which are to be regarded as models for private enterprise. At the same time they insist on a careful inspection of all schools, whether they are run by municipalities or local boards, by private individuals or by missionaries or other societies. Private enterprise is encouraged by an extensive system of grants-in-aid, which are dependent on the efficiency of the school and its expenditure on teachers and general equipment.

### Secondary Schools

There is some difficulty in the classification of schools, secondary and primary. Here the fifth Quinquennial Review is followed as issuing from the Director General of Education Secondary schools are divided into *English* and *Vernacular* in the first place. In the former English is a subject of instruction in the lower part and the medium of instruction in the upper part of the school. In the latter English is not taught in any way. In the second place these schools are divided

### Primary Schools

Here again there is a difficulty of classification owing to the different systems prevailing in the different provinces. However they are divided generally according to grade into lower primary and upper primary. Middle vernacular schools, are really only superior primary schools and bear little relation to the systems prevailing in secondary schools. Primary schools, as the education of the masses through the vernacular. If the medium of instruction be taken as the differentiation, then clearly middle vernacular schools ought to be classed as primary. In 1913-14 the number of these schools was 116,650. In the Government Resolution of Feb 1913 it found the following statement "It is the desire and hope of the Government of India to see in the not distant future some 91,000 primary public schools added to the 100,000 which already existed for boys and to double the 4½ millions of pupils who now receive instruction in them."

### Primary to Anglo-Vernacular

The transition from Primary to Anglo-Vernacular schools, that is, from primary to secondary education, is comparable to the transition from a Board school in England to a secondary school under the authority of a Municipal or County Council. But there is a difficulty owing to the different systems prevailing in all provinces a boy may begin in a vernacular primary school and pass from it to a secondary school. According to the Quinquennial Review, "In Bombay all children



## Statement of Educational Progress in BIHAR and ORISSA.

1913-14	1912-13	1911-12		
No change	No change	18,032,708	Area in square miles	
			Population { Male 9,170 Female 18,827,238	
22,309 91 7	22,482 93 7	21,900 9, 7	Public Institutions for Males	
			Number of arts colleges Number of high schools Number of primary schools	
2,062 28,712 307,902	1,722 28,110 302,242	1,430 23,402 307,341	Male Scholars in Public Institutions	
			In arts colleges In high schools In primary schools	
26.3	28.0	24.9	Female Scholars in Public Institutions	
			In arts colleges In high schools In primary schools	
1,811	1,498	1,239	Public Institutions for Females	
			Number of arts colleges Number of high schools Number of primary schools	
712,701	704,485	660,021	Total Scholars in public institutions	
			Male { Female {	
107,170	95,281	90,953	Total ..	
			Total SCHOLARS (both male and female) in all institutions	
817,082	799,766	760,871	Expenditure (in thousands of rupees).	
			From provincial revenues From local funds From municipal funds	
861,712	817,214	804,058	Total Expenditure from public funds	
			From fees From other sources	
79.92	61.83	55.91	GRAND TOTAL OF EXPENDITURE ..	

be substituted for the study of the village map found a perplexing problem, and it may be doubted whether with wisdom any but indefinite differences can be introduced.

### Professional and Technical Education

Industrial schools are to be found dotted about India, some maintained by Government, others by municipalities or local boards and others by private bodies. One of the most important institutions of this type is the Victoria Jubilee Technical Institute in Bombay. There is also the well-known Thomason College of Engineering at Roorkee, the College of Science at Poona, and the Sibpur College in Bengal. There are schools of art in the larger towns of India, where not only architecture and the arts are studied but also practical crafts like pottery and iron-work. There is also a school of forestry at Dehra Dun in the north of India. Besides these there are many medical schools and colleges which prepare students for the medical degrees of the various Universities, and of which the Grant Medical College in Bombay may be taken as a good example. There are agricultural colleges, the most important of which is the Pusa Agricultural College and Research Institute, which trains experts in specialised branches of agricultural science, such as agricultural chemistry, economic botany, mycology and entomology. We may also mention the Indian Institute of Science at Bangalore, the product of generous donations by the Tata family. Two institutions mark the progress of educational interest in the Bombay Presidency, the Government Institute of Science—for whose capacious building (not yet completed) the Government is indebted to the generosity of Sir Cornwallis Jephson, Sir Jacob Sassoon, and Sir Currimbhoy Ebrahim—and the College of Commerce, instituted to supply teaching in connection with the establishment of a Faculty of Commerce in the University.

### Colleges for Teachers

There are training colleges for secondary teachers in various parts of India, and what are called in some cases Training Colleges, in others normal schools, for the training of vernacular teachers. As there has been considerable dissatisfaction, on account of the defective qualities and pay of teachers in schools, Government are now awakening to the importance of paying more careful attention to these institutions and the last Resolution provides for a better scheme of pay for teachers.

### Education of Girls

Hitherto little attention has been paid to this important branch of education. Even in the latest Resolution nothing is definitely proposed though certain lines are laid down for guidance of enterprises in this direction. However there do exist schools and colleges for girls, while a number of the female sex are educated at institutions common to both sexes. Arts Colleges, Medical Colleges and the like admit both male and female students, and a small percentage of women attend them. In those Presidency towns, however, where there are no colleges

proceeding to the vernacular schools before the vernacular school course to a higher point than this" (p. 87). It may be useful to describe the actual procedure in one Presidency in Bombay, before proceeding to an Anglo-vernacular school a boy must have passed standard IV of a primary school and a girl standard III. The curriculum of the first three standards of an Anglo-vernacular school is very similar to that of the last three standards of a vernacular school (Standards V, VI and VII)—except that in the Anglo-Vernacular school English is added as a subject, though not used in those standards as the medium of instruction.

In the provinces of Bombay, Bengal, the Punjab and the Central Provinces a distinction is drawn between rural and urban primary schools. The curriculum differs according to this distinction. In the Central Provinces the distinction was, up to the time of the publication of the last Review, one of time mainly, to allow the boys to spend half their time in agricultural work. The object of rural schools is not so much to teach agriculture as to train the minds of prospective agriculturists in an elementary way. In 1895 an attempt was made in Bombay to introduce agricultural text-books, the effect of which may only have been to destroy the faith of the boys in their father's primitive methods without having any appreciable influence on the improvement of agricultural practices. About a year ago a meeting of educational inspectors decided against this experiment. The whole question of remodelling the rural school courses has been reconsidered, and in Bombay at least that and the ordinary primary course have been brought closer together. A boy who starts in a rural school can now complete the whole primary course in the same time as a boy who starts in an urban school. The idea is that boys educated in rural schools should not be put at a disadvantage. At the same time—and this is important—an attempt has been made to make rural education, however elementary, form a system of elementary education which should be complete in itself. Hence the differences between rural education and ordinary primary education are unimportant and indelible, in Bombay at least. The last Government Resolution declares it to be "not practicable at present in most parts of India to draw any great distinction between the curricula of rural and of urban primary schools," but in the latter class of schools there is special scope for practical teaching of geography, school excursions, etc., and the nature study should vary with the environment and some other form of simple knowledge of the locality might advantageously

# Statement of Educational Progress in the UNITED PROVINCES

Area in square miles Population	Total Population		1908-09		1909-10		1910-11		1911-12		1912-13		1913-14		
	Male Female	No change	No change	No change	No change	No change	No change	No change	No change	No change	No change	No change	No change		
Public Institutions for Males															
Number of arts colleges	24	No change	31	4,150	107,164	32	107,207	32	4,800	35	108,707	35	109,714		
Number of high schools	108		112	12,005	24,628,344	116	24,641,831	117	24,257	123	30,254	123	30,254		
Number of primary schools	9,508		9,267	430,360	22,565,048	9,067	22,540,213	9,258	22,540,213	10,158	22,540,213	10,444	22,540,213		
Male Scholars in Public Institutions															
In arts colleges	3,510	No change	4,180	4,180	41,802	4,002	41,802	4,800	4,800	5,286	5,286	5,286			
In high schools	25,647		33,102	33,102	34,257	34,257	35,804	35,804	38,232	38,232	38,232	38,232			
In primary schools	430,360		432,487	432,487	470,053	470,053	537,551	537,551	554,007	554,007	554,007	554,007			
Percentage of male population in public institutions	14.6	No change	14.4	14.6	14.4	15.5	15.5	17.4	17.4	18.1	18.1	18.1			
Public Institutions for Females															
Number of arts colleges	4		No change	5	1	20	20	20	6	21	22	22			
Number of high schools	22	20		911	911	937	937	1,008	1,008	1,007	1,007				
Number of primary schools	975	936		936	936	936	936	936	936	936	936				
Female Scholars in Public Institutions															
In arts colleges	59	No change	51	51	51	61	61	55	55	60	60				
In high schools	1,827		1,824	1,824	1,804	1,804	1,084	1,084	2,187	2,187	2,187				
In primary schools	39,416		37,365	37,365	41,340	41,340	42,043	42,043	10,603	10,603	10,603				
Percentage of female population in public institutions	1.3	No change	1.3	1.2	1.3	1.1	1.1	1.5	1.5	1.6	1.6				
Total (Male and Female) in Public Institutions															
Total (Male and Female) in public institutions	3,539		No change	4,215	4,215	4,215	4,063	4,063	4,857	4,857	5,293	5,293			
Percentage of total population in public institutions	14.6	14.6		14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6				
Public Institutions for Males and Females															
Number of arts colleges	24	No change	31	4,150	107,164	32	107,207	32	4,800	35	108,707	35	109,714		
Number of high schools	108		112	12,005	24,628,344	116	24,641,831	117	24,257	123	30,254	123	30,254		
Number of primary schools	9,508		9,267	430,360	22,565,048	9,067	22,540,213	9,258	22,540,213	10,158	22,540,213	10,444	22,540,213		
Male and Female Scholars in Public Institutions															
In arts colleges	3,510	No change	4,180	4,180	41,802	4,002	41,802	4,800	4,800	5,286	5,286	5,286			
In high schools	25,647		33,102	33,102	34,257	34,257	35,804	35,804	38,232	38,232	38,232	38,232			
In primary schools	430,360		432,487	432,487	470,053	470,053	537,551	537,551	554,007	554,007	554,007	554,007			
Percentage of total population in public institutions	14.6	No change	14.4	14.6	14.4	15.5	15.5	17.4	17.4	18.1	18.1	18.1			

especially for women, it seems to be generally recognised that there ought to be, particularly when one remembers how important it is to bring the influential class of women and mothers round to some sympathy with modern thought and ideals. It may be presumed that Government will pay very limited attention to this side of education until Indians themselves demand such a move. Most Indians object to invasions on their family life and take a different attitude to women from that of Western races. Still there are schools for girls and female inspectresses employed by Government.

### European Schools

There are schools for Europeans and Eurasians in India, and they are inspected by Government inspectors specially appointed for the control of European schools and for the allocation of grants to schools under their sphere of influence. The education of the domiciled communities has been found a singularly perplexing problem, and in 1912 a special conference was summoned to consider the matter. The difficulty is that they are a thing apart from the general system of education devoted to Indians proper.

### Educational Services

These are divided into (a) the Indian Educational Service, (b) the Provincial Educational Service, (c) the Subordinate Educational Service.

The statistical table of educational progress in British India published for 1913-14 gives the following results—

The grand total of pupils in all institutions (including private institutions) has risen to 7,618,147. The largest increases occurred in Bengal (28,083), Madras (107,703), the United Provinces (31,174), Bombay (41,332), and Bihar and Orissa (14,201).

The percentage of pupils in public institutions to children of school-going age (reckoned at 15 per cent of the population) has risen in the case of boys to 27.9, in that of girls to 5.1.

## STATISTICAL RESULTS.

The figures for higher institutions in 1913-14 were as follows—

(c) Subordinate Educational Service.—The majority of this service are headmasters (a few), assistant deputy inspectors and the assistant masters in Government high and middle schools. In Bengal a number of poorly paid teachers have been converted into a "lower subordinate service." The pay and prospects of this service are not good, and much complaint is made of the inferior nature of the teaching in schools run by its members. In 1907 the figures for this service stood at 6025. The maximum pay of this service is somewhere about Rs 400. The minimum pay used to be Rs 30, but is now Rs. 40 per mensem.

(b) Provincial Educational Service.—In this service also are found principals and professors of colleges, headmasters and inspectors of schools, and, in addition, translators to Government and members engaged in other exceptional posts. This service is composed of Indians and recruited in India, the pay scheme being arranged on a much lower scale than that of the Indian Service and the cheaper rates within the qualifications and the maximum pay is Rs 700, the minimum pay Rs 200. There is a general division between two branches, collegiate and general.

(a) Indian Educational Service.—The members for Education who sit in the Council of the Government are in India, at the seat of Government, is the Member for Education who sits in the Council of the Government.

At the head of all Educational departments in India, at the seat of Government, is the Member for Education who sits in the Council of the Government. The number of posts in this service in 1907 throughout India was 157. Additions have been made since then, but it is clear that the Service is understated, if one considers the range and importance of its work. Hitherto higher educational work has been little appreciated in India, particularly by Englishmen. Now-a-days much is said of its importance, but little done for those who carry it out. At the head of all Educational departments in India, at the seat of Government, is the Member for Education who sits in the Council of the Government.

higher allowances of Rs 250 to Rs 500, and an allowance of Rs 100 after fifteen years of approved service to those who do not get any of the other allowances. Except for the Director of Public Instruction, the limit of the prospect of a member of the Indian Educational Service is Rs 1,500 a month, the average prospects being considerably less. There is no short service pension. Schemes are on foot to improve the prospects of the service. Hitherto this service which is in reality one of the most important in the country has not been rightly estimated, though its members are as a rule men of real culture. Hence the great difficulty of recruitment. The number of posts in this service in 1907 throughout India was 157. Additions have been made since then, but it is clear that the Service is understated, if one considers the range and importance of its work. Hitherto higher educational work has been little appreciated in India, particularly by Englishmen. Now-a-days much is said of its importance, but little done for those who carry it out.

On colleges 46,784 470 47,254  
In High Schools 606,169 21,812 487,471  
In middle schools 542,255 41,216 583,641  
The total of those under primary institution in public and private schools (including primary departments of secondary schools, other schools, and private institutions where a vernacular is taught) was 9,486,691  
The number of children under training for the provision of clothing has risen to 17,190

# Statement of Educational Progress in the PUNJAB

	1908-09	1909-10	1910-11	1911-12	1912-13	1913-14
Area in square miles						
Population { Male Female						
Total Population	97,272	No change {	97,213	No change	No change	No change
Public Institutions for males	10	10	11	11	0	9
Public Institutions for females	94	98	98	101	102	111
Number of arts colleges	3,408	2,345	3,321	3,417	3,080	4,155
Number of high schools	1,809	2,022	2,270	2,059	2,770	3,163
Number of primary schools	34,971	40,805	44,803	47,740	46,090	47,646
Male Scholars in Public Institutions	140,642	167,040	164,081	170,410	167,230	210,700
In arts colleges	138	14-9	150	169	181	108
In high schools						
In primary schools						
Percentage of male scholars in public institutions to male population of school going age						
Public Institutions for Females	12	12	15	16	16	1
Number of arts colleges	600	602	609	637	709	703
Number of high schools						
Number of primary schools						
Female Scholars in Public Institutions	944	1,007	1,244	1,605	1,626	1,721
In arts colleges	22,672	26,309	26,174	29,269	32,118	37,109
In high schools	19	22	24	27	29	34
In primary schools						
Percentage of female scholars in public institutions to female population of school going age	226,502	245,722	257,432	279,402	208,014	320,182
Public Institutions for Males	27,282	30,095	32,166	36,675	39,898	45,031
Public Institutions for Females	254,784	270,717	289,018	316,107	337,552	371,815
Total	302,576	329,460	346,040	351,113	410,401	430,956
For Males (both male and female) in all institutions	17,06	18,01	18,63	22,70	29,70	28,24
Expenditure (in thousands of rupees)	12,43	12,80	12,31	12,44	16,17	21,06
From provincial revenues	3,06	3,43	4,05	3,53	5,06	4,57
From local funds	33,15	34,43	34,90	38,76	46,02	54,77
From municipal funds	11,08	13,84	15,20	17,73	20,67	22,52
Total Expenditure from public funds	16,46	10,66	10,38	12,14	18,61	16,234
From other sources	65,50	58,43	60,57	68,65	84,20	93,22
Grand Total of Expenditure						

Education in the Punjab

The number of pupils in technical schools

has increased to 12,751

The number of schools for Europeans and

the domiled Community now stands at 37,078

The number of Muhammadan pupils amount-

to 1,108,213, of whom 4,956 are in colleges

### Expenditure

The total expenditure in 1913-14 was

Rs 10,02,23,877, an increase of more than two

crores on that of the preceding year. Of the

total, roughly 559 lakhs are now met from

public funds (against 497 in the preceding

year), viz, 367 lakhs from provincial, 147

from district and 37 from municipal funds

contributed 185 lakhs

Among the larger provinces, the highest

expenditure was in Bengal, 220 lakhs

*Principal developments*—In the year 1912-13,

the following additional allotments from im-

perial funds were announced for education in

provinces and politically administered areas—

319 lakhs non-recurring from the surplus revenue

of that year, and 55 lakhs recurring from the

revenue of the year 1913-14. The developments

of the five preceding years have been described

in the quinquennial review. Compared with

the figures for 1910-11, the increase during

the past two years in pupils of public institu-

tions has amounted to 13·4 per cent and that

in expenditure to 25·5 per cent.

Among special features of the period are the

establishment of a Faculty and the scheme

for a college of Commerce in the Bombay Uni-

versity. A generous gift of 10 lakhs to the

University of Calcutta was made by Dr Rash-

bihari Ghose. A committee worked out a

scheme for the Dacca University, a project

which has subsequently received the general

approval of the Secretary of State. The reports

on education in the various provinces show that

in Madras the rules for grant-in-aid have been

made more elastic and the amount given

for grant-in-aid has increased by nearly 5 lakhs.

In other provinces improvements have been

made in secondary education, and in the Bom-

bay Presidency the pay of assistant teachers in

government secondary schools has been increa-

sed. The pay of primary school teachers has

likewise been improved, in the Punjab, graded

scales of salaries from Rs 12 to Rs 30 a

month are being generally introduced, in

Bihar and Orissa the stipend paid to aided school

teachers have been regulated, in the Central

Provinces a sum has been earmarked for render-

ing pensionable the pay of all masters drawing

Rs 11 and over. Among developments in

Muhammadan education the foundation of an

Islamic College at Peshawar has been conspi-

### Recent Developments

Bihar and Orissa

arrangement of the provinces of Bengal and

now arrangement necessitated by the re-

tables differ from those given last year in the

It should be observed that the Statistical

Tables of India published on the 22nd February 1913,

which also laid down the policy of the Govern-

of India published in the resolution which appeared in the *Gazette*

immediately preceding years have been describ-

The main developments of the last and of

immediately preceding years have been describ-

ed in the resolution which appeared in the *Gazette*

of India published on the 22nd February 1913,

which also laid down the policy of the Govern-

ment of India. The year, witnessed the

assertion at the Imperial Durbar by com-

mand of His Most Gracious Majesty the King

of the predominant claims of edu-

cational advancement, the announcement of a

recurring Imperial grant of 50 lakhs for the

promotion of truly popular education, and the

high expression of his hopes and wishes for the

expansion and improvement of education

delivered by His Majesty the King-Emperor in

graciously receiving an address presented by

the Calcutta University. In addition to the

recurring grant of 50 lakhs a recurring grant of

10 lakhs was sanctioned for university and

higher education, and a non-recurring grant of

65 lakhs was also made. There has been

expansion in expenditure accompanied by an

increase of those under instruction.

Other features of the year have been the

collection of materials for the preparation of

extensive schemes for the spread of elementary

education, and, in certain provinces, for the

improvement of secondary education, the

growth of new ideas regarding university teach-

ing, which has resulted in the proposal for at

teaching and residential university at Dacca and

Benares and the establishment of Professorships,

Readerships, and Lectureships in Universities,

like those of Calcutta and Bombay, the gene-

rous gifts of Sir T. N. Palt and Dr Rash-

bihari Ghose to the University of Cal-

cutta, the creation of a department of

industries at Madras as a portion of the scheme

of industrial training and development, the

sanctioning of an industrial scheme for the

Central Provinces, the institution of a College

of commerce in Bombay, an inquiry carried

out by Colonel Atkinson and Mr Dawson into the

question of bringing technical institutions into

closer touch with the employers of labour,

the institution of proposals for an Oriental

Research Institute, and the conference held

in July 1912 on the education of the domiled

community.

## Statement of Educational Progress in BURMA

	1907-08	1908-09	1909-10	1910-11	1911-12	1912-13
Area in square miles						
Population	230,750 { No change	No change	246,700 6,141,601 5,911,601 12,057,601	246,700 6,141,601 5,911,601 12,111,217	246,700 6,141,601 5,911,601 12,111,217	No change
<b>Public Institutions for Males</b>						
Number of arts colleges*	1	2	2	2	2	2
Number of high schools*	11	13	13	16	17	17
Number of primary schools	5,261	5,105	4,852	4,761	4,761	4,761
<b>Male Scholars in Public Institutions</b>						
In arts colleges*	148	232	291	362	362	362
In high schools*	8,893	9,590	10,165	10,011	10,555	10,555
In primary schools	138,087	131,180	121,177	125,552	125,552	125,552
Percentage of male scholars in public institutions to male population of school going age	24.1	21.1	20.4	20.0	21.5	21.5
<b>Public Institutions for Females</b>						
Number of arts colleges	0	9	11	11	1	14
Number of high schools	610	610	753	552	555	599
Number of primary schools	9	9	9	9	9	9
<b>Female Scholars in Public Institutions</b>						
In arts colleges	7	12	17	22	2,140	2,140
In high schools	1,083	1,401	1,074	2,155	2,140	2,140
In primary schools	55,906	53,770	53,291	53,854	57,321	70,321
Percentage of female scholars in public institutions to female population of school going age	9.1	10.1	8.1	8.5	9.0	10.9
<b>Total Scholars in public institutions</b>						
Male	192,428	192,862	188,129	194,401	202,105	227,073
Female	70,358	70,100	71,052	75,000	80,255	97,050
<b>TOTAL SCHOLARS (both male and female) in all institutions</b>	262,986	262,962	259,181	270,401	282,360	324,123
From provincial revenues	439,211	439,973	429,992	445,255	459,699	504,025
From local funds	17,46	17,03	10,71	18,98	22,31	25,72
From municipal funds	3,71	4,07	4,08	4,22	4,44	(a) 5,07
Total Expenditure from public funds	3,35	3,40	3,18	3,08	3,88	(b) 4,47
From fees	24,61	24,60	24,27	26,98	30,63	35,86
From other sources	10,32	13,77	14,63	15,09	16,63	18,40
	4,48	4,44	4,83	5,40	6,20	7,20
<b>GRAND TOTAL OF EXPENDITURE</b>	39,31	42,71	43,63	47,87	53,30	61,65

(a) Includes Rs 72,817 being provincial contribution to District Class Fund  
 (b) Includes Rs 57,772 being provincial contribution to Municipalities

\* Include also vernacular high schools

## 3

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# Statement of Educational Progress in the NORTH-1

	1908-09.	1909-10	1			1913-14
Area in square miles						
Population { Male Female Total Population						
<i>Public Institutions for Males</i>						
Number of arts colleges	1	1	1	1	1	2
Number of high schools	12	12	12	12	12	14
Number of primary schools	254	267	264	200	335	440
<i>Male Scholars in Public Institutions</i>						
In arts colleges	22	19	22	38	37	77
In high schools	3,017	4,253	4,486	5,146	5,438	4,097
In primary schools	11,415	12,009	13,034	14,120	16,800	22,827
Percentage of male scholars in public institutions to male population of school going age	10.1	11.2	11.8	13.1	15.4	18.7
<i>Public Institutions for Females</i>						
Number of arts colleges						
Number of high schools	..	25	27	..	29	30
Number of primary schools	23					
<i>Female Scholars in Public Institutions</i>						
In arts colleges						
In high schools	..	1,576	1,776	1,923	2,044	2,239
In primary schools	1,301	1.3	1.4	1.5	1.6	1.7
Percentage of female scholars in public institutions to female population of school going age	1.1	1.3	1.4	1.5	1.6	1.7
<i>Total Scholars in public institutions</i> { Male Female Total						
TOTAL SCHOLARS (both male and female) in all institutions	17,639	19,589	20,019	21,236	27,344	33,124
	1,005	1,873	2,004	2,247	2,790	2,619
	19,235	21,462	22,012	23,483	29,140	35,743
	28,891	30,045	31,801	34,011	38,472	44,445
<i>Expenditure (in thousands of rupees)</i>						
From provincial revenues	*80	*58	†1,35	99	1,568	3,19
From local funds	83	91	92	1,42	1,306	2,17
From municipal funds	55	53	61	68	1,176	65
Total Expenditure from public funds	218	2,02	2,88	3,00	8,50	(u) 5,86
From fees	40	45	47	50	65	82
From other sources	61	65	63	63	47	3,38
GRAND TOTAL OF EXPENDITURE	3,19	3,12	3,88	4,28	9,62	10,26

\* Imperial Revenues  
† Including Rs 58,215 from Imperial Revenues

† Including Rs 2,60, 1,60 and 1,04 in thousands respectively from Imperial Grants  
(u) Including Rs 2,44 (in thousands) from Imperial Grants



## The Benares Hindu University.

Objects of the University.—These may be said to be as follows —

- 1 To promote the study of the Hindu Shastras and of Sanskrit literature generally, as a means of preserving and popularising the best thoughts and culture of the Hindus and all that was good and great in the ancient civilisation of India

- 2 To promote learning and research generally in arts and science in all branches
- 3 To advance and diffuse such scientific, technical and professional knowledge, combined with the necessary practical training, as is best calculated to promote indigenous industries and develop the material resources of the country
- 4 To promote the building up of character in youth by making religion and ethics an integral part of education

**Proposed Faculties**—In a letter to Sir Harcourt Butler the Maharaja Bahadur of Darbhanga has given an outline of the proposed faculties, which will be those of Oriental Studies, Theology, Arts, Science (Pure and Applied), and Law. The main objects of the first named literature. It is proposed to place in charge of the work a European Sanskrit scholar who will be assisted by Indian professors and pandits of the old class. The faculties of Arts and Science will work for the present on the lines laid down by the existing universities. The study of some special branch of technical education will be best inaugurated under the heading Applied Science which will be expanded into a Faculty of Technology in due course. The Faculty of Law will specialise in the Hindu Law and its study from original sources. It is hoped also that in course of time there will be Faculties of Agriculture, Commerce, Medicine, Surgery and other branches of knowledge such as Music and the Fine Arts.

**Proposed constitution**—In July, 1914, Sir Harcourt Butler addressed a letter to the Maharaja of Darbhanga, in which he stated that the Government of India and the Secretary of State had come to the conclusion that the best form of constitution would be to constitute the Lieutenant-Governor of the United Provinces as ex-officio Chancellor of the University with certain opportunities for giving advice and certain powers of intervention and control. "The Hindu University, he wrote, 'though not empowered to withdraw colleges from outside regulations, it will admit students from all parts of India on the other hand it will be localised in or by Benares. There will be obvious advantages in having as Chancellor of the University the Lieutenant-Governor of the Province who is also Chancellor of the Allahabad University and who will be able to help to coordinate the work between the two, to secure thorough correspondence advantages and to foster a spirit of healthy co-operation. Moreover, such a constitution is in accord with the general policy of decentralisation which is now pursued by the Government of India."

There were originally three distinct movements in favour of founding a Central Hindu University. In the first place, in 1904, the Hon. Fardic Madan Mohan Malaviya made proposals which were confirmed and approved by the Sanatan Dharma Mahasabha or Congress of Hindu Religion which met at Allahabad in January 1906. About that time, Mrs. Annie Besant also put forward the idea of establishing a University at Benares and upon the third place, a number of Hindu gentlemen under the guidance of the Hon. Mahabir Singh Bahadur, K.C.I.E., of Darbhanga were considering the possibilities of starting an educational institution at Benares. The leaders of these movements soon recognised that a union of forces was essential, and in April 1911 Mrs. Besant and the Hon. Pandit Madan Mohan Malaviya met at Allahabad to consider possible lines of agreement. This meeting was followed shortly afterwards by another, when it was agreed that the first governing body should consist of representatives of the Hindu community, Mrs. Besant and representatives of trustees of the Central Hindu College and also that the Theological faculty should be entirely in the hands of Hindus. At the same time Mrs. Besant agreed to withdraw her petition for a charter which was then before the Secretary of State. At subsequent meetings presided over by the Maharaja Bahadur of Darbhanga a draft constitution was arranged and it was decided to wait upon the Hon. Member for Education and lay before him the provisional scheme. In the meantime, deputations for the collection of funds were instituted and these visited the leading centres in India. The result was most satisfactory. Amounts, big and small, were promised not only from India, but from Indians in Africa, and besides Hindus of all denominations and stations in life, some Mahomedans, and a few Europeans, offered as well as unofficial, have promised to contribute.

**Government Approval**—In October 1911, Sir Harcourt Butler wrote a very sympathetic letter signifying the approval of Government to the scheme and indicating the conditions laid down by the Government of India —

- 1 The Hindus should approach Government in a body, like the Mahomedans
- 2 A strong, efficient and financially sound college with an adequate European staff should be the basis of the scheme
- 3 The University should differ from existing Indian Universities by being a teaching and residential institution and by offering religious instruction
- 4 The movement should be entirely educational
- 5 There should be the same measure of Government supervision as in the case of the proposed University at Allahabad

It was subsequently added that a sum of Rs. 50,00,000 must be collected, but the capitalised value of the properties transferred in trust and the perpetual grants made by the Maharajas of Jodhpur, Kashmir and Bikanir may be included

The power which, in the opinion of Government, it is necessary to reserve to the Chancellor of the University Committee, others were enumerated. Some of these had been suggested by the University Committee, others were emergency powers which might never be exercised. The principle underlying them all is that, in the interest of the rising generation and the parent, the Government must be in co-operation with University and in a position to help it effectively and secure sound finance. The interest of the Government and the students and their parents in this matter are necessarily identical.

In concluding the letter referred to above, Mr Harcourt Butler said—"In order to meet the sentiment of the subscribers it has been decided that the University shall be called the Benares Hindu University, it will have no religious test and will be open to students of all denominations as well as Hindus. Hindu theological teaching and observances will not be compulsory for and but Hindus. It will also be a teaching and residential university. The terms mentioned above represent the conditions, the acceptance of which is a necessary precedent to the elaboration of any detailed scheme.

**The Bill Passed**

On the basis of these principles further discussion took place between the Education Member of the Government of India and the promoters of the University, and by degrees embodied in this agreement was introduced into the Imperial Legislative Council in 1915 and passed at the closing session of the Council. For a summary of this debate the reader is referred to the section which records the work of The Imperial Legislative Council (9).

The cardinal features of the Act are as follows—

It establishes and incorporates a teaching and residential Hindu University at Benares first of all, it creates a corporation sole of the University. The portals of the University are "open to persons of all classes, castes and creeds," but provision shall be made "for religious instruction and examination in Hindu religion only," this instruction is compulsory in the case of Hindus special arrangements are to be made for the religious instruction of Jains or Sikhs students.

General of India for the time being shall be the Chancellor of India for the time being shall be the Lord Kitchener, the Lieutenant Governor of Agra and time being of the United Provinces of Agra and Oudh shall be the Visitor, who has the power to inspect the University and its colleges, and to amend the proceedings of the University, they are found to be not in conformity with this Act, Statutes and Regulations. The authorities and Officers of the University are named to be (1) The Chancellor, (2) The Pro-Vice-Chancellor, (3) The Vice-Chancellor, (4) The Council, (5) The Senate, (6) The Syndicate, (7) The Registrar, and (11) The Treasurer. In administrative affairs, or the University, the Court is the supreme governing body and has the power to review the acts of the Senate. The Senate is the academic body of which the executive body of the Court is called the Syndicate. To meet the recurring charges, a permanent endowment of fifty lacs of rupees is to be made and invested in authorised securities. The degree, diploma, certificates and other academic distinctions granted by the University are to have the same recognition at the hands of Government as those granted by the existing Indian Universities. The formation and scope of statutes and Regulations of the University are provided with minute detail. The Government in Council has extensive power to act in cases of emergency, viz, the removal of any member of the teaching staff, the appointment of a certain examiner, and the raising of the scale of remuneration of the staff. The University grows out of the present Hindu University Society, which is now dissolved and all its property, rights, powers and privileges are to vest in the Benares Hindu University.

It will be seen from the above that the Act stipulates that the University shall commence with an endowment of fifty lacs of rupees sums aggregating approximately Rs 82 lakhs have been promised and Rs 50 lakhs paid. The Government of India have undertaken to make an annual contribution of a lakh of rupees. It is expected that the foundation stone of the new University buildings will be laid by the Viceroy in February 1916.

## The Mahomedan University.

The movement in favour of transforming the Mahomedan Anglo-Oriental College at Aligarh into a teaching and residential University was started as early as the end of last century. It was hoped that the foundation of such an institution would awaken among Mahomedans the memory of their old seats of learning and prove an incentive to them in the future to regain the intellectual eminence from which they seem to have fallen of late years. Some time ago it was observed in a Government report that the backwardness in education on the part of Mahomedans was due partly to poverty, partly to indifference and partly to their educational wants not being the same as those of the remainder of the population amongst whom they live. In this year's report, however, it is stated that a remarkable awakening on the part of Mahomedans in this direction has been witnessed during the last decade, when the total number of pupils under instruction in all classes of institutions rose by nearly 60 per cent. On the other hand in the matter of higher education their numbers remain well below that proportion notwithstanding the large relative increase. It was the aim of Sir Syed Ahmed Khan, K.C.S.I., years ago to place the benefits of a liberal education within the reach of the Mahomedan community and in 1875 a school was opened which three years later was converted into the Aligarh College. Under the inspiring influence of Mr. Beck and of Mr. (now Sir) Theodore Morrison great strides have been made. The college is now affiliated to the Allahabad University for the First Arts and B.A. for the B.Sc. in mathematics, chemistry and physics, for the M.Sc. in mathematics and chemistry and D.Sc. in mathematics, Sanskrit, History, Philosophy, Political Economy and Mathematics. The students of the college are also instructed in the theology and faith of Islam.

**State of the Project.**—His Highness the Aga Khan, the foremost Indian Mahomedan, was ripe to make an appeal for funds for the long before, should be indubitably held up. It has been proposed that the interest on the funds subscribed should be devoted to other educational objects, such as scholarships, but this is opposed by some of the subscribers, who maintain that they subscribed to a University, and if the funds are not to be devoted to this purpose they should be returned to the donors.

His Majesty the King Emperor visited India to announce in person his coronation to his Indian people. As the result of a spirited appeal, followed by a very active personal

appeal, followed by a very active personal



extending all over the country. The forest administrative unit was to be small enough to secure local knowledge and interest on the part of each member of the board, and the various minor boards of the district were to be under the control of a general district board, and to send delegates to a district council for the settlement of measures common to all. The non-official element was to preponderate, and the elective principle was to be recognised, as in the case of municipalities, while the resources and financial responsibilities of the boards were to be increased by transferring items or provincial revenue and expenditure. It was, however, recognised that conditions were not sufficiently advanced or uniform to permit of one general system being imposed in all provinces, and a large discretion was left to Local Governments. The systems introduced in different parts of India by the Acts of 1883-5 (most of which are still in force) consequently varied greatly.

**Mofussil Municipalities**—The total number of municipalities has altered little for many years past. New municipalities have been formed from time to time, but there have also been removals from the list. There was, indeed, a rather marked decrease according to the last decennial review (1902-12) and the number in 1911-12 was actually less than it was thirty years earlier. This result was brought about by the reduction to "notified areas" of a considerable number of the smaller municipalities in the Punjab and United Provinces. The figures showing the constitution of the municipalities call for little comment. Taking them as a whole the proportion of elected members was in 1911-12 rather more than a half, whereas in 1901-02 it was slightly less. The proportions of non-officials and Indians, already high in 1901, also increased during the decade. Elected members are in the majority in the cities of Bombay, Madras and Rangoon and in Bengal (excluding Calcutta), Bihar and Orissa, the United Provinces, and the Central Provinces, in the North-West Frontier Province and Baluchistan, on the other hand, there are no elected members, and in Burma they form a small minority. Non-officials outnumber officials everywhere, and Indians outnumber Europeans to an even greater degree, except in Rangoon. Taking the municipalities individually, some of the commissioners are elected in the great majority of cases. Representatives in the larger municipalities is in general by ward or classes of the community, or both. Voters must be residents not below a specified age, and property or status qualifications are generally laid down. The Chairman or President of the Municipal Corporation is sometimes nominated under the orders of the Local Government, but more often chosen by the commission from among themselves. The only provinces in which there has been in the past a large proportion of elected non-official chairmen are Madras, the Central Provinces, and the two Bengals, in view of the changes made in that province in the closing years of the decade added to the list, but Bombay has now to be regarded as embryonic municipalities. These are

this Act and subsequent Provincial Acts a large number of municipalities was formed in all provinces. The Acts provided for the appointment of commissioners to manage municipal affairs, and authorised the levy of various taxes, but in most Provinces the commissioners were all nominated, and from the point of view of self-government, these Acts did not proceed far. It was not until after 1870 that much progress was made. Lord Mayo's Government, in their Resolution of that year introducing the system of provincial finance, referred to the necessity of taking further steps to bring local interest and supervision to bear on the management of funds devoted to education, sanitation, medical charity, and local public works. New Municipal Acts were passed for the various Provinces between 1871 and 1874, which, among other things, extended the elective principle, but only in the Central Provinces was popular representation generally and successfully introduced. In 1881-2 Lord Ripon's Government issued orders which had the effect of greatly extending the principle of local self-government. Acts were passed in 1883-4 that greatly altered the constitution, powers, and functions of municipal bodies, a wide extension being given to the elective system, while independence and responsibility were conferred on the committees of many towns by permitting them to elect a private citizen as chairman. Arrangements were made also to increase municipal resources and financial responsibility, some schemes of provincial revenue suited to and capable of development under local management being transferred, with a proportionate amount of provincial expenditure, for local objects. The general principles thus laid down have continued to govern the administration of municipalities down to the present day. In several Provinces there are, besides municipalities, "notified areas," i.e., small towns which are not fit for full municipal institutions, but to which parts of the municipal Acts are applied, their affairs being administered by nominated committees. These are to be regarded as embryonic municipalities.

**Local Boards**—The establishment of boards for dealing with local affairs in rural areas is a relatively recent development. No such boards existed in 1858, though some semi-voluntary funds for local improvements had been raised in Madras and Bombay, while in Bengal and the United Provinces consultative committees assisted the district officers in the management of lands devoted to local schools, roads and dispensaries. The system of raising cesses on land for purposes of this description was introduced by legislation in Madras and Bombay between 1865 and 1869, in the case of Bombay, nominated committees were to administer the proceeds of the cess. The year 1871 saw a wide development of legislation for local administrative purposes, partly due to growing needs, and partly the result of the financial decentralisation scheme of Lord Mayo's Government, various Acts being passed in different Provinces providing for the levy of rates and the constitution of local bodies. In some cases with an elective element, to administer the funds. The whole system was reorganised in accordance with the policy of Lord Ripon's Government. Under the Orders of 1881-2 the existing local committees were to be replaced by a system of boards

in favouring the sanction of the Local Government, and alterations, and alterations, and alterations. Various provisions exist as to the exercise of control by Government, particularly as regards finance and appointments. No loans can be raised without Government sanction, and generally spreading municipal budgets, and alterations in taxation require the sanction of the Local Government, but more often chosen by the commission from among themselves. The only provinces in which there has been in the past a large proportion of elected non-official chairmen are Madras, the Central Provinces, and the two Bengals, in view of the changes made in that province in the closing years of the decade added to the list, but Bombay has now to be regarded as embryonic municipalities. These are





remaining commissioners were appointed, as they are under the new Act, by the Local Government, who also appoint the President. The Act of 1904 also introduced various other changes in the law which need not be specially noticed. It was modelled to a large extent on the Calcutta Act of 1899. Executive authority is vested in the President, who is removable under the existing law, by a vote of 28 commissioners. A Standing Committee, consisting of the President and eight other commissioners, is mainly concerned with financial and building questions. The President, like Bombay, is usually a member of the Indian Civil Service. The number of persons enrolled as voters in 1911-12 was 9,874 rather more than 6 per cent of the total adult male population. The control of the Local Government over the municipality has hitherto been more stringent than in the other Presidency towns.

## DISTRICT AND LOCAL BOARDS

**Elective Principle**—The degree to which the elective principle has been introduced varies greatly in different parts of India, but there is a considerable proportion of elected members everywhere, except in the North-West Frontier Province, where the system of election was abolished in 1903. On the whole, however, the principle of representation is much less developed in rural than in municipal areas. In Madras the elective system, previously applied to the district boards only, was extended to the Taluk Boards in 1909. In the United Provinces and the Central Provinces there is a substantial majority of elected members. **Chairmen**—The various Acts usually leave it to the Local Government to decide whether the Chairman of the district board shall be elected or nominated. In most provinces the Collector has, as a general rule, been appointed, though in the Central Provinces the President is elected, and is usually a non-official. In the United Provinces election, subject to the veto of the Local Government, was prescribed by the Act of 1906, but in practice the Collector is chosen as regards the subordinate boards, the law and practice vary. Generally speaking, the law and practice are on the footing of subordinate committees or agencies of the district boards, with very limited powers and resources, but in Madras they exercise independent authority, subject to the general control of the district board, in regard to the less important roads, primary education, medical work, and sanitation. Provision is made, on much the same lines as in the case of municipalities, for the exercise of control in certain directions by Government or its officers. **Sub-District Boards**—The Decentralisation Commission, having in view the admitted failure of sub-district boards as a whole, under existing arrangements, except in Madras and Assam, put forward proposals for making them the principal agencies of rural board administration by giving them independent resources, separate spheres of duty, and large responsibilities. Proposals for giving the district boards a larger measure of independence were also put forward.

The duties and functions assigned to the municipalities in urban areas are in rural areas entrusted to District and Local Boards. The systems of rural local government in the various provinces differ widely. The Madras organisation, which provides for three grades of local boards, most nearly resembles the pattern set in the original orders. Throughout the greater part of that province important villages and groups of villages are organised as "Unions", each controlled by a PANCHAYAT. These bodies receive the proceeds of a light tax on houses, and spend them mainly on sanitation. Next come the Taluk Boards, which form the agency for local works in the administrative sections into which the districts are divided. Finally, there is the District Board, with general control over the local administration of the district. In Bombay there are only two classes of boards, for districts and TALUKAS respectively. In Bengal, the Punjab, and the North-West Frontier Province the law requires a District Board to be established in each district, but leaves the establishment of subordinate local boards to the discretion of the Local Government. The Bengal Act authorises the establishment of Village Unions also, but this provision has not been very largely used. The United Provinces Act formerly in force directed the establishment of district and sub-district boards, but the latter were abolished, as mentioned below, in 1906. The system in the Central Provinces bears some resemblance to that which prevails in Madras, and the circles being aggregated into "circles", each of which has a Local Board, while for each district there is a District Council having authority over the Local Boards. In Assam district boards have not been introduced, and independent boards are established in each sub-division. Neither district nor sub-district boards exist in Burma, or in Baluchistan. District boards were started in Lower Burma in accordance with Lord Hutton's Local Self-Government Resolution of 1882, but the members took no active interest in them, and they died out after a few years. The district funds are now administered by the Deputy Commissioners of districts.

**Madras**—A new Municipal Act for the City of Madras was passed in 1904. By this Act the number of the municipal commissioners, to whom as a body the name Corporation was now applied, was increased from 32 to 36, besides the President, and provision was made for the appointment of three commissioners each by the Madras Chamber of Commerce and the Madras Trades Association, and of two by such persons, as the Local Government might direct, while the number to be elected as divisional elections was fixed at 20. Under the Act previously in force the total number of elected commissioners was not more than 24. The chief executive authority is vested in a separate officer, appointed by Government, usually from the ranks of the Indian Civil Service, styled the Municipal Commissioner, who can, however, be removed by a vote of 45 councillors.

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**Revenue and Expenditure.**—The sources of income open to rural boards are much narrower and less elastic than those of the municipalities. The greater part of their revenue is derived from a cess which they are empowered to levy on the land, and which usually does not exceed one anna in the rupee on the annual rent value (or, in ryotwari provinces, the Government assessment). The cess is ordinarily collected by Government agency along with the land revenue, and varies in amount with the latter. Since 1905 the income derived from the land cess has been supplemented by a special Government contribution calculated at the rate of 25 per cent on that income. Substantial amounts, apart from this special contribution, are granted to the district boards by the Local Governments for various purposes apart from receipts in connection with their educational and medical institutions, and markets, the only other important sources or independent revenue are pounds and ferries, and, in Madras, road tolls. Except in Madras, the sub-district boards have generally no independent sources of income, and merely receive such moneys as the District Boards may allot to them. In Madras the Taluk Boards receive half the land cess levied in their areas, as well as certain miscellaneous revenues.

**District and Local Boards**—The following table shows the general constitution of the boards in each province, the figures in italics relating to local boards, the others to district boards. The figures are for 1911-14, save where otherwise stated.—

[illegible]

POLICY OF GOVERNMENT DEFINED.

\* Figures for 1912.

The Government of India passed on April 26th, 1915, a long resolution dealing with the growth and nature of local self-government in India. From what has gone before it will have been seen that the Decentralization Commission made many and detailed recommendations on this question, and the intention of the resolution was to summarize policy on these points, as well as to complete the chain of decisions on the question of local self-government which commenced with the earlier resolution. On what however to the wide diversity of conditions in India, and to the extent to which local self-government must be a provincial question it was not apparently possible to lay down broad and simple lines—expected as in the main the development of local self-government is a question of the province of funds and no one has suggested whence they shall come except in the way of a Resolution of the Imperial Exchequer, which is already overbrought. The Resolution was

On a review, the Government of India decided to accept the view of the local-government or administration as to the degree of progress possible at the present time. Local Government and Administrations, the resolution added, were prepared to advance in the direction of the main recommendations of the Decentralisation Commission.

Turning to details the resolution showed that of the 666 **Chairmen of Municipalities** 222 consisted of elected non-officials, 248 or elected officials, 51 of nominated non-officials, 174 of nominated officials. The election of non-official chairmen has long been urged by Indian politicians, and their views have been so far accepted that the majority of Local Governments are in favour of substituting, so far as possible, non-official for official chairmen. With regard to the larger municipalities, the Bombay system is now very much in favour. This consists in the main of a constitution under which an elected chairman is the mouth-piece of the corporation, whilst the head of the executive is an official nominated by Government but under the control of the Corporation. Whilst not pressing this system on all Local Governments, the resolution pointed out that it had the advantage of securing a continuous and strong executive administration by a paid staff, whilst maintaining the corporate control and activity of the municipal board. As to the **financial resources** of the municipalities, it was shown that the aggregate income of the 701 municipalities in existence at the close of 1912-13 (excluding the Presidency towns and Ranagum) amounted to ₹3,282,845, or ₹4,92,42,675 apart from extraordinary receipts, or an average of ₹4,683 or ₹70,246 a year. This shows a very rapid expansion. Contributions from Government have materially assisted this expansion. Since 1911, the Government of India have made grants amounting to ₹3,076,466 (₹4,61,47,000), of which ₹3,68,200 (₹5,23,000) are recurring, for urban sanitation. Municipalities have also received their share—the exact figure is not easily ascertainable—of the large educational grants made by the Government of India since 1911, amounting to about ₹3,987,800 (₹5,98,17,000), of which ₹3,82,668 (₹5,24,00,000) are recurring. Municipal boards have been relieved of all charges for the **maintenance of police** within municipal limits. In almost every province the recommendation that municipalities should be relieved from financial responsibility for famine relief and should receive assistance from Government in the case of severe epidemics, has been already given effect to, or the principle has been accepted. The Government of India have also accepted a further recommendation, namely, that assistance may legitimately be given by Government to poorer municipalities which, without it would be unable to carry on the normal standard of administration required from them.

On the very important subject of financial control, which is sometimes described as minute Government of India suggested that the municipalities should have a free hand with regard to their budgets, the only check being the maintenance of a prescribed minimum.

Since this resolution was issued the Bombay Government has appointed a strong mixed committee to consider the whole question of local self-government in the rural areas, whose report is awaited with great interest.

The Decentralisation Commission recommended that **sub-district boards** should be the principal agencies of rural administration. The Government of India left this question to the discretion of the Local Governments. The Local Government favoured a policy where district and sub-district boards should contain a large preponderance of elected members. They took the view, in which the Government of India concurred, that an official sub-district board, the total number of sub-district and sub-district boards in 1913 was 199 and 536 respectively, with an aggregate income of ₹3,787,219 (₹5,68,08,292). In the same year they received specially large grants from the sums allotted by the Imperial Government for education and sanitation. The resolution analysed at some length the proposal that district boards should be empowered to levy a railway or tramway cess, in order to expedite the improvement of communications. The Government of India have empowered district boards to levy a special extra land cess of three ples in the rupee on the annual rate value of land for the construction of light railways or tramways, condition on the proposal obtaining the assent of three-fourths of the members of the board. The Government of India also decided that the board could issue debentures secured on the railway property when its accumulated funds were insufficient to bear the cost of construction. They also recommended that the present restrictions on the financial powers of the boards should be gradually relaxed, in the direction of securing full discretion subject to the maintenance of the prescribed working balance.

Turning to the **organisation of the villages** the resolution expressed the views of the Government of India towards the establishments of panchayats in the following passage—"where any practicable scheme can be worked out in co-operation with the people concerned, full experimental grants should be made on lines approved by the local government or administration concerned." With this general recommendation they left the matter to the local authorities. With regard to the **Presidency corporations**, the Decentralisation Commission recommended that the Bombay system of an unofficial chairman and an official head of the executive should be generally followed. Bengal and Madras agreed generally with the proposal but Ranagum regarded it as unsuitable to the conditions there obtaining. The Government of India declined to endorse the suggestion that a development of local self-government as one of the policy of the Government of India towards the provinces for the control of the local bodies. In conclusion, the resolution summarised the Local Government Board should be formed in each Province for the control of the local bodies.

# Local Government Statistics

**Municipalities** - With this General Introduction we can now turn to the statistical results on the working of Local Self Government. The following table gives information as to the constitution of municipal committees, taxation, &c., in the chief provinces in 1913-14 (or 1912-13 where no later figures are available) -

	Population within Municipal Limits	Number of Municipalities	Total Number of Members	By Qualification		By Employment		By Race.		Incidence of Municipal Taxation per head.	
				By-Office	Nom.-nated	Elected	Officials	Non-Officials	Euro-peans		Indians
Presidency Towns											
Calcutta	890,067	1	50	—	25	25	4	46	10	31	6 12 0
Bombay	979,446	1	72	—	10	50	7	65	18	54	15 6
Madras	618,000	1	30	1	16	20	5	31	12	21	4 7
Bangalore	281,038	1	25	1	5	10	3	22	13	12	14 0
District Municipalities											
Madras	1,078,115	114	1,520	108	531	887	100	1,336	161	1,905	2 5
Bombay and Orissa	1,170,855	55	772	78	225	400	100	672	105	667	1 4
Assam	1,275,552	18	107	37	68	62	50	117	37	100	2 1
Bombay and Sind	2,751,932	158	2,110	187	830	911	157	1,053	137	1,093	3 3
Madras	2,090,585	62	901	77	302	492	137	824	110	815	2 0
United Provinces	4,000,000	86	4,161	93	211	577	175	1,000	131	1,047	2 5
Punjab	1,620,670	104	1,170	217	410	513	237	942	102	1,077	3 5
N. W. Frontier Province	141,028	6	110	16	83	15	10	53	18	101	4 1
United Provinces and Belgaum	890,081	66	762	9	270	153	161	597	71	687	2 11
Bengal	680,170	11	500	183	252	97	198	302	160	400	3 2

\* 1912-13.

## Sanitation.

The history of the sanitary departments in India goes back for about fifty years. During that period great improvements have been effected in the sanitary condition of the towns, though much remains to be done, but the progress of rural sanitation which involves the health of the great bulk of the population has been slow, and incommensurate with the thought and labour bestowed on the subject. "The reason lies in the apathy of the people and the tenacity with which they cling to domestic customs injurious to health. While the inhabitants of the plains of India are on the whole distinguished for personal cleanliness, the sense of public cleanliness has ever been wanting. Great improvements have been effected in many places, but the village house is still often ill-ventilated and over-populated, the village site dirty, crowded with cattle, choked with run vegetation, and poisoned by stagnant pools, and the village tanks polluted, and used indiscriminately for bathing, cooking and drinking. That the way to improvement lies through the education of the people has always been recognised."

Of recent years the pace has been speeded up as education progresses, education developed, and funds were available. In a resolution issued in May 23rd, 1914, the Government of India summarised the position at that time, and laid down the general lines of advance. This resolution (Gazette of India, May 25th, 1914) should be studied by all who desire to understand the present position and policy. Its main features are summarised here.

"The governments in India have moved more rapidly of late. In 1898, the Government of India issued an important statement of policy. In 1908, Imperial grants amounting to Rs 30,00,000 (£ 200,000) a year were made to local Governments. A new department of the Government of India was created in 1910 in order to relieve the Home Department of education, sanitation and some other branches of the administration. In addition to sanitary conferences held by local Governments, three All-India sanitary conferences were convened at Bombay, Madras and Lucknow, respectively, over which the Hon'ble Sir Harcourt Butler presided as Member of the Governor-General's Council in charge of the department concerned. These conferences were attended by non-officials as well as officials, by laymen as well as professional sanitarians. Again, the Indian Re-

search Fund Association has been founded to further the prosecution of research, and the measures generally in connection with the Government of India make an annually recurring grant of 6 lakhs of rupees (£3,33,333). Moreover, since the constitution of the new department of the Government of India, Imperial grants have been made to local Governments and administrations to the amount of Rs 4,61,47,000 (£3,07,49,00), of which Rs 55,23,000 (£ 368,200) are recurring, and Rs 4,06,24,000 (£ 2,708,266) are non-recurring. In addition, grants amounting to Rs 82.33 lakhs (£ 548,866) a year have been made to district boards in certain provinces, a substantial portion of which will, it is hoped, be expended on rural sanitation. These grants have rendered practicable the execution of schemes which a few years ago seemed beyond the limits of financial possibility, and there can be little doubt that the movement for sanitary reform is now well established and progressive throughout the country.

**Organisation**—As a result of the Plague Commission's Report Lord Curzon's Government took up with vigour the reorganisation of the sanitary department. Research institutes were started and an appointment of Sanitary Commissioners with the Government of India was created. The functions of this office were to advise the Government of India upon sanitary and bacteriological questions to settle with local Governments the principles on which an advance should be made and to organise and direct research throughout India. The arrangements were not completely successful. Among the disadvantages, the separation of research from clinical work deterred men from entering the department, and the office work in connection with research prevented the Sanitary Commissioner from undertaking wide and constantly touring. The organisation was accordingly modified in 1912. The Sanitary Commissioner is now the independent adviser to the Government of India in all technical and sanitary matters, but all questions of personnel and the administration of the bacteriological department and research generally have been placed under the control of the Director-General, Indian Medical Service, with the Sanitary Commissioner as his staff officer.

### The Sanitary Organisation

The sanctioned strength of the superior sanitary organisation in India now is

- (a) A Sanitary Commissioner with the Government of India  
(b) A bacteriological department comprising—  
(i) thirteen laboratory appointments distributed as follows—

Central Research Institute  
Bombay Bacteriological Laboratory  
King Institute of Preventive Medicine, Madras  
Pasteur Institute, Kasauli  
Pasteur Institute, Coonoor  
(ii) fifteen new appointments recently sanctioned for the prosecution of research work and direct investigation in the field

(c) The following establishments under local Governments —

Province	Sanitary Commissions	Deputy Sanitary Commissions	1st class	2nd class	Sanitary Engineers	Deputy Sanitary Engineers
Madras	1	1	12	10	1	0
Bombay	1	1	4	9	1	2
Central India	1	1	6	12	1	1
United Provinces	1	1	11	17	1	3
Punjab	1	1	2	3	1	1
Uttar Pradesh	1	1	2	10	1	1
Bihar & Orissa	1	1	2	8	1	2
Central Provinces	1	1	2	7	1	2
Azamgarh	1	1	1	1	1	1
North West Frontier Province	1	1	1	1	1	1
Delhi	1	1	1	1	1	1

Provincial Agency—In their resolution, dated May 1912, the Government of India provided for a large increase in the number of Deputy Sanitary Commissions and for the appointment of health officers (or the first-class for larger municipalities and of the second class for the smaller towns) on the lines of detailed local Governmental Sanitary Commissions. The Sanitary Commissions empowered to consult and confer informally with the Government of India is a court of health officers connected with sanitation. He is not permitted to encroach upon the authority of Local Governments over the officers under their control.

Provincial Officers—The position of Provincial Sanitary Commissions towards the Government of India do not wish to interfere with the arrangements which local Governments may consider best suited to local conditions but they desire to insist on the importance of defining the functions of the two officers and securing to the Sanitary Commissioner the position of responsible technical adviser to the local Government in all matters affecting public health.

Sanitary Boards—In every province, sanitary boards have been composed with varying powers, some being merely advisory, others having authority to sanction schemes and allot funds. These boards are composed of officers belonging to the medical, sanitary, engineering and other branches of the civil services with the addition of non-officials. The Government of India view with favour and confidence the evolution of financial authority and responsibility to these boards, and they commend to local Governments the appointment of a permanent salaried secretary to the board where this has not been done. They believe that such an appointment, wherever made, has resulted in an increase of efficiency.

Training—Arrangements for training the superior sanitary staff are now engaging the attention of the Government of India. The creation of an imperial department itself, but to decentralise other branches of sanitation. The policy of the Government of India is to keep the control of research under itself, but to decentralise other branches of sanitation.

Voluntary Agency—The Government of India attach great importance to the organisation of voluntary agencies and have recently made a grant of Rs 20,000 (£1,333) a sum equivalent to that given by the Bombay Government to the Bombay Sanitary Association, which was founded in 1903, and now has corresponding branches in several districts and Native States.

Research—The policy of the Government of India is to keep the control of research under itself, but to decentralise other branches of sanitation. The creation of an imperial department itself, but to decentralise other branches of sanitation.

engaging urgent attention

of an increased staff of sanitary engineering is

controls the vaccination staff. The provision

of the local authorities and in most provinces

surgeon in every district is the sanitary adviser

large numbers in towns. In addition, the civil

sanitary inspectors are now being employed in

sanitary inspectors in proportion to population

ably is required to employ one or more trained

system in force in Madras whereby every municipal

the Government of India recommended the

tion by legislation in Bengal simultaneously,

Bombay Presidency, and have recently been

unit person. Such powers already exist in the

health officer and to veto the appointment of an

not exist to require a municipality to appoint a

Government to take powers, where these did

The Government of India also advised local

health officers being met by imperial grants

of pay fixed for Indians and half the cost of the

sanitary (ommissions) on the basis of the scale

1913, the entire cost of the additional Deputy

health officers were sanctioned in 1912 and

large addition to the number of second class

ments of health officer of the first-class and a

Sanitary (ommission), thirty-five appoint-

Twelve additional appointments of Deputy

proposals received from local Governments

for larger municipalities and of the second class

appointment of health officers (or the first-class

of Deputy Sanitary Commissions and for the

India provided for a large increase in the number

dated the 2nd May 1912, the Government of

in practical hygiene and in the study of the bacteriology and etiology of tropical diseases. It is hoped in the near future to make arrangements in India for the former and to utilise the schools of tropical medicine at Calcutta and elsewhere for the latter. Meanwhile, a British diploma in public health is required from candidates for the post of Deputy Sanitary Commissioners and health officers of the first class. The problems of public health in India are vitally complicated by the fact that biting insects are a prominent factor in the dissemination of disease, and it is obviously desirable to provide in India, as soon as possible, a complete course of training for sanitary officers.

Training classes for sanitary inspectors are now held in all the more important provinces

**Department of Public Health.**—A substantial beginning has thus been made for the development of a department of public health and Indians have been freely enlisted for it. The posts of Deputy Sanitary Commissioners and health officers are now open to Indians. Nine Deputy Sanitary Commissioners out of 26 and the majority of health officers are Indians. The new bacteriological department consisting of 28 officers is also open to duly qualified Indians.

As health officers and Sanitary Engineers gradually relieve Deputy Sanitary Commissioners of much of the drudgery of inspection and routine work, it is hoped that the latter will be set free to deal with epidemics and communicable diseases from a higher plane, and to consider issues of public health wider than those which they are able to review to-day. It is therefore important to provide in advance free interchange between them, the laboratory workers and those carrying out practical research in the field.

**Progress of Research.**—Research is slowly lifting the veil which hides the secrets of disease and mortality and opening up fields of inquiry scarcely thought of a generation ago. The discovery by Sir Ronald Ross of the part played by the mosquito in the transmission of malaria and the appointment of the Plague Commission in 1898 are landmarks in the history of Indian Sanitation. In 1902, a research institute was founded at Guindy in Madras, named the King Institute after Lieutenant-Colonel King, C. I. E., I. M. S., in view of his devoted efforts in the cause of sanitation in that presidency. In 1905 Lord Curzon's Government summed up the position and the policy of the Government of India in regard to the establishment of laboratories for the study of problems of public health in India. The functions of the general laboratory were original research, the preparation of curative sera and the training of scientific workers. The functions of the provincial laboratories were diagnostic and special research connected with local conditions. This policy has been steadily developed. The Central Research Institute has been established at Kasauli. The Plague Research Laboratory at Parel has been extended and re-equipped and is now the bacteriological laboratory for the Bombay Presidency, and a proposal is under consideration to attach to it a school of tropical medicine. A research laboratory and school of tropical medicine are under construction at Calcutta. Pasteur Institutes

exist at Kasauli and Coonoor. A third is about to be established in Burma, and it is under discussion to establish others in Assam (where it will be combined with a research laboratory) and Bombay.

Besides the routine work connected with the bacteriological diagnosis of disease, anti-vaccines and sera and general research, these laboratories at different times have been the centres of many special investigations, notable amongst which are those on plague and enteric fever. It is hoped that before long each province in India will have a laboratory fully equipped for research.

**Research Fund and Association.**—The foundation of the Indian Research Fund and Association in 1911 has marked an important era in sanitary progress. The control and management of the association are vested in a governing body, the president of which is the Member in charge of the Education Department of the Government of India. The governing body is assisted by a scientific advisory board, of which not less than three members have seats on the governing body. They examine all proposals for work in connection with the scientific objects of the association and report as to their importance and feasibility. The members of this board are appointed for one year, but are eligible for re-election, and they have power to add to their number. The present members are the Director-General, Indian Medical Service, the Sanitary Commissioner with the Government of India, the Director of the Central Research Institute at Kasauli, the Officer in charge of the Central Medical Bureau and the Assistant Director-General, Indian Medical Service (Sanitary). Sir Ronald Ross has been elected an honorary consulting member. The membership of the Indian Research Fund Association is open to non-officials. Every donor of Rs. 5,000 is entitled to become a permanent member, while every subscriber of Rs. 100 per annum can be a temporary member. Members of the association are entitled to attend and take part in the annual general meeting of the association and to receive copies of the reports and other publications issued from time to time by the association. Although, so far, the fund has been financed solely by the Government of India, it is hoped that in time Indian philanthropists will contribute towards the expansion of the association by founding chairs of research by financing experimental research measures and otherwise.

**Work of the Association.**—The association has been active and can already point to some achievement. Out of an income of Rs. 15 lakhs (£100,000) received since its incorporation and up to the end of 1913-14, an expenditure of over Rs. 14 lakhs (£93,383) has been sanctioned. In 1911, Major S. P. James, I. M. S., was deputed to study yellow fever in its endemic area and to draw up proposals for protecting India against the introduction of the disease. Those proposals are still under consideration. In the meanwhile, serogonoma surveys have been carried out in Calcutta, Bombay, Madras, Ranchi and Rangoon and other seaports. Anti-malaria schemes based on preliminary surveys have been carried out at a cost of Rs. 6,02,000 (£40,133). Investigations are at pre-



sent in progress into the problems connected with the prevalence of cholera, kail-asaz, dysentery, leprosy and gonorrhoea, as well as inquiries into the plasmology of cholerae derivatives, the use of hydroxy-methyl-gas as a disinfectant and the bacteriology of food-poisoning bacteria. Other investigations are under consideration regarding bacteriological methods of purifying water supplies, the different anti-cholera vaccines and sera, the methods of water filtration and self removal best suited to Indian conditions, and the etiology of diseases and the factors of short duration of life. These will be started so soon as more trained research workers are available. It is hoped also to carry out, during the next non epidemic season, an experiment in plague prevention on a large scale.

Besides financing the investigations conducted by its own staff, the association gives grants-in-aid to outside research on approved lines. The co-operation of other workers has been sought, and every encouragement has been given to them. Grants for research have been made, for instance, to Professor Macdonald, Dr. Hosack and Mr. Howlett. The services of Indians have also been enlisted. Dr. Korke is engaged in an important investigation into kail-asaz while Mr. Wait, a medical entomologist, is employed under the association. The Government of India cordially approve the policy of encouraging private enterprise in the cause of research.

The association has also started a journal for the publication of medical research work done in India—the "INDIAN JOURNAL OF MEDICAL RESEARCH"—published quarterly. The favourable reception which has been accorded to the first three numbers is evidence of the increased interest that is being taken in sanitary science in India to day.

The investigations enumerated above represent the work directly under the supervision of the Government of India. The local Governments also are fully alive to the importance of research, and in some provinces the special officers are at present engaged in investigating the causes underlying the local prevalence of malaria and dengue, suitable schemes for the mitigation of that disease.

**Water Supply**—Few subjects have received more attention or late than the provision of a piped supply of filtered water in towns. Complete figures are not available but sums amounting to at least Rs. 3,51,58,297 (52,343,888) have been spent during the last 20 years on completed schemes. Project costing Rs. 1,10,03,433 (15,93,562) are under construction and projects costing Rs. 1,14,41,750 (5,762,983) have been prepared and sanctioned. These figures are exclusively of the expenditure in the Presidency towns and Rangoon.

**Drainage**—Drainage schemes on modern lines, are the basis of all sanitary improvement in urban areas. The demand for them is scarcely less than that for piped water and is steadily on the increase. As in the case of water supply complete figures are not available but the known expenditure during the last twenty years has been considerable and is now rapidly increasing. The expenditure on completed works outside the Presidency towns and Rangoon

during that period amounted to Rs. 97,65,049 (46,10,000), whereas the cost of the works under construction is estimated at Rs. 1,54,20,502 (41,02,80,033). In the beginning precedence over drainage was given to piped water supply but experience has demonstrated the advantage of introducing both concurrently. Without drainage there is no means of carrying off the surplus water and without piped water supply it is difficult to flush the drains properly.

When drainage schemes on modern lines were first started in this country, there seems to have been a bias against the use of sewers, and, wherever possible, open drains were adopted. Experience has shown that the preference for the open drain and the fear that sewers would give excessive trouble were not well founded. On the contrary, much of the advantage of a drainage system is lost if only open drains are used, as the old system of hand-carrying latrines has to be continued. Moreover, economy in establishment is possible only in the case of a sewage system.

**Pilgrimages**—Pilgrimages necessitating as they do the collection of large numbers of persons, often more than a million, at one place at one time have an important sanitary aspect mainly in connection with cholera and other communicable diseases. The Government of India recently decided to examine the sanitary arrangements at the chief places of pilgrimage throughout India and local Governments were asked to appoint provincial committees for this purpose under the presidency of the Sanitary Commissioner with a view to for the mutuality of improvement. The inquiry is still in progress but the Government of India have already made a grant of Rs. 2 lakhs (£1,33,333) and promised an additional grant of 4 lakhs of rupees (£2,00,000) spread over four years towards the improvement of the pilgrim route to Badrinath, and they have made a further recurring grant of Rs. 20,000 (£1,33,333) a year for the same object. The importance of pilgrimages to the Health by Indian Muslimgans is undergoing close scrutiny. The Government in Council anticipate that these inquiries will lead to significant sanitary improvement and promote the convenience and comfort of many millions of His Majesty's loyal Indian subjects.

**Rural Sanitation**—The following observations are based on practical experience of rural sanitation—

(a) Travelling dispensaries may be used to spread a knowledge of the simple facts regarding the more common diseases. For this purpose the sub-assistant surgeons in charge should be given a special training in hygiene. Once they become known to the people as healers of the sick their advice is acceptable.

(b) The improvement of the village water-supply is as important as it is difficult. Apparently, excellent results have been obtained by disinfection of water with permanganate of potash. Further experiments are being made in this direction.

parts of India in the use of tube-wells, etc. It might serve as an useful object lesson to use pumps and tube-wells for the provision of water at fairs, schools, hospitals, and local public offices. In some localities, a tank supply alone is possible and the difficulty is to protect even new tanks from pollution.

(c) In several provinces, notably in Madras, village unions or circles have been formed and their committees entrusted with small grants for the improvement of the sanitation of the village site. This measure might be extended experimentally elsewhere. It is calculated to encourage discussion and inquiry regarding sanitary work.

(d) Village midwives are, in some districts, encouraged by small grants of money and rewards to attend at the head-quarters hospital for a short and simple

(e) In most districts in India, the civil surgeon is also in theory the sanitary officer of the district. His duties at head-quarters, however, do not allow him to tour and inspect in the district to the extent that is necessary, even in the case of epidemics. In the district it is sometimes not possible for him to leave headquarters. In some provinces, district sanitary officers have been appointed and there can be little doubt that many more such appointments are required and that one of the most urgent and hopeful measures for promoting rural sanitation is the appointment of well qualified and whole-time district health officers to control and organise all sanitary arrangements and experiments in the district.

Birth and Death Rates.—The population of the areas in which births and deaths were registered was 238,823,365, according to the census of 1911, and the number of births registered in 1913 was 39,37 per mille, compared with 38,95 per mille in 1912, and an average of 38,37 per mille in the five years 1908-12. The total number of deaths was 6845,018=28.72 per mille, as compared with 29.71 per mille in 1912 and 32.77 for the five years 1907-11. This was the lowest rate since 1898. The rates for the provinces are given in the following table —

Province	Birth Rates (per mille)		Death Rates (per mille)		
	1912	1913	1912		1913
Total			Total	Urban	Rural
Delhi	41.8	43.7	33.0	33.0	33.0
Bengal	35.3	33.7	30.1	30.1	29.8
Bihar and Orissa	42.5	30.0	31.0	31.0	27.4
Assam	32.2	33.1	25.0	25.0	27.8
United Provinces	45.4	47.7	29.6	29.9	34.6
Punjab	45.3	45.4	26.1	26.6	29.7
N.W. Frontier Pro-	37.1	30.2	23.5	23.4	24.7
vince					
Central Provinces and	48.2	49.3	41.8	42.3	30.9
Berar	30.9	32.2	23.8	24.3	20.8
Madras	26.32	25.9	16.8	16.8	23.6
Coorg	35.0	35.0	34.9	34.9	26.7
Bombay	31.7	31.7	26.0	26.0	25.4
Burma Lower	33.0	34.2	27.5	27.5	23.6
Burma Upper	47.08	43.2	29.0	29.0	27.9
Ajmer-Merwara	38.95	39.3	29.7	29.7	28.7

The most striking feature was the diminished death-rate in the Central Provinces where cholera and malaria had prevailed in 1912, and in Bombay where cholera showed a marked decrease. The increased death-rate in the United Provinces and the Punjab was due chiefly to "fevers" which had shown an exceptionally small mortality in the previous year. The reduced birth-rate in Bengal is attributed to the rise in prices.

The excess of births over deaths ranged from 19 per mille in the Central Provinces to 4.3 per mille in Bengal. The mean percentage of male to female births ranged from 126.6 in the North-West Frontier Province to 104 in Bihar and Orissa.

The greatest mortality occurred in December, while the lowest was in February. Infantile mortality was highest among the major provinces in Upper Burma, the Central Provinces, and the United Provinces, the total rate per mille for all India was 19.2 male and 19.7 female, strenuous efforts are being made to reduce these figures which, though still excessive, show a welcome decrease.

Urban Vital Statistics.—The following table gives the ratio of deaths per mille in cities of British India whose population exceeded 150,000 in 1911.—

Death Rate per Mille	1908-12 (Mean Rate)		Death Rate per Mille	1908-12 (Mean Rate)	
	1908-12	(Mean Rate)		1908-12	(Mean Rate)
Calcutta	40.0	43.7*	Delhi	29.2	32.7
Bombay	38.1	33.7	Lahore	32.7	37.5
Madras	45.1	38.0	Cantonment	40.1	40.6
Coimbatore	22.0	29.7	Agartala	47.0	61.8
Banarès	39.6	33.5	Amritsar	39.4	38.2
Howrah	17.4	21.9	Almora	30.3	28.4
Patna	40.9	50.4	Amritsar	50.9	58.2

\* Rate for 1912

Chief Diseases.—There are three main classes of fatal disease: specific fevers, diseases affecting the alimentary organs, and lung diseases. Infectious and skin parasites, ulcers and other disorders of surgery widely prevail. Much of the sickness and mortality is due to deficient powers of resistance and to insupportable habits and surroundings. The table below shows the number of deaths from each of the principal diseases recorded in British India and the death rates per 1,000, during the three years from 1911 to 1913.

Years	Small pox	Cholera	Fevers	Dysentery and Diarrhoea	Plague	Respiratory Diseases
1911	58,538	354,005	4,207,356	253,636	733,582	223,822
	25	148	17.63	1.06	3.07	0.94
1912	89,337	407,769	3,936,085	292,216	263,037	247,736
	37	171	16.49	1.22	1.10	1.04
1913	98,135	294,816	3,983,112	246,578	198,456	237,229
	41	124	16.71	1.03	0.88	1.000

With regard to special diseases cholera is much less prevalent than formerly. In 1913-14 it occurred chiefly in Bengal and Bihar and Orissa. Plague forms the subject of a separate section. When reference is made to "fever" in India, malarial fever is generally understood, but many causes of death and many diseases much more fatal than malarial fever are included under the heading. The fever death rates, as usual, varied greatly, ranging in the major Provinces from 2.3 in Bengal to 6.7 in Madras. The malarial section of the Indian Research Fund Association is housed at Kasauli, but has a field laboratory in Delhi where classes are held. In 1913, 58 doctors underwent instruction at these classes. Anti-malarial operations have been proposed to send a special expedition to study anti-malarial measures in Italy. The measures adopted to fight malaria are the sale of quinine at cheap rates and the extermination of mosquitoes by such methods as drainage, petrolage and jungle clearing.

**Vaccination**—The total number of vaccinations performed among the civil population during 1913-14 was 9,872,086, being a slight decrease from the previous year's work. Of primary vaccinations 96.95 per cent, and of re-vaccinations 69.66 per cent, were successful, about 86.19 per mille of the population were successfully vaccinated. The number of infants successfully vaccinated was 46.83 per cent of the number under a year old. Arm-to-arm vaccination has for 10 years been steadily replaced by the use of pure calf lymph. All the larger provinces have, or will shortly have, their own calf-lymph depots.

**Plague**—The present epidemic of plague in India first broke out at Bombay in August 1896, and as the table below shows, it has been responsible for a heavy rate of mortality since that date. In 1907 the deaths from plague attained the highest total yet recorded, viz, 1,315,892, for India as a whole, the number in British India alone being 1,166,223, or 5.16 per mille. In 1908 the mortality declined enormously falling to 156,800, the lowest total since 1900. In 1909 there was once more a relatively low mortality, viz, 178,808 deaths, or fewer than in any year since 1900, excepting 1908. In 1910 and 1911 there was a severe recurrence, especially in Bengal, the United Provinces, and the Punjab. In the latter part of 1911 and in 1912 the virulence of the epidemic abated, and the 1913 figures show a still further fall. In 1914 there was a rise, owing to a recurrence of the disease in Bombay, and in 1915 there has been a serious recurrence in the Punjab.

Plague is so local in its visitations that all general and unanalysed statistics are likely to prove misleading. Many parts of India have been almost entirely free from its ravages, and in the greater part of the country the outbreaks cannot be described as having been acute or disastrous. On the other hand, general statistics tend to conceal the severity of the distress caused by the disease in particular districts. In some parts of the Punjab and the United Provinces the mortality has been especially severe.

1896-97	57,543	1907	1,115,892
1898	116,285	1908	136,480
1899	139,009	1909	178,808
1900	92,807	1910	512,005
1901	282,027	1911	846,870
1902	676,365	1912	306,488
1903	883,076	1913	217,864
1904	1,143,993	1914	295,897*
1905	1,069,140		
1906	356,721		

\* Preliminary figure

The reasons for this uneven incidence are at present somewhat obscure. The mortality in Eastern Bengal and in Assam has been at no time appreciable largely, it is believed, because the habits of the people and the structure of their houses are unfavourable to the breeding of rats while in the Madras Presidency and in Burma the epidemic has never reached serious dimensions. How far the comparative immunity of Madras is due to a policy of segregation and surveillance and how far to climatic conditions is undecided.

The Advisory Committee on Plague Investigation in England and the Plague Commission in India, whose constitution has been described in former issues of this Report, have concluded their investigations, which have led to most important results. The main facts in regard to the mode of propagation of an epidemic and the life history of the plague bacillus have been ascertained and rational methods of attack have thus been in all possible. It is now generally agreed (1) that epidemic bubonic plague in man is directly dependent on epidemic plague in rats (2) that the vehicle of contagion between rat and man is the plague-infected rat-flea, (3) that bubonic plague is not directly infectious from man to man, and (4) that the life of the plague bacillus outside the bodies of men, animals, or fleas is of short duration. In large towns plague may persist through the year, but in villages such persistence is exceptional, and the recurrence of an epidemic is probably due to fresh infection.

In the light of the knowledge and experience now acquired it is possible to deal satisfactorily with the disease when effective control can be established over the sanitary conditions, and in the case of the native army and in limited areas such as jails there has been remarkable success. But attempts to establish such control over large areas would involve too great an interference with the habits, prejudices, and sentiments of the people, and the application of measures of proved utility must depend upon the particular circumstances of each locality and upon the character of its inhabitants. In the face of great practical obstacles, three principal measures for combating plague are now adopted—

(1) The temporary evacuation of quarters in which plague is prevalent (2) Inoculation with the prophylactic fluid (3) The systematic destruction of rats

**Hospitals, Dispensaries, Asylums**—The following table gives figures for Indian hospitals for the general public. Those under Head (2) are for special classes of persons, such as railway servants, policemen, &c. —

	(1) Civil Hospitals and Dispensaries (State Public, Local Fund and Private aided)			(2) State Special and Railway Hospitals			(3) Private Non-aided Institutions		
	No of Institutions	No of In-patients	No of Out-patients	No of Institutions	No of In-patients	No of Out-patients	No of Institutions	No of In-patients	No of Out-patients
1912	2,733	492,798	28,956,768	826	53,350	2,154,284	669	51,709	4,774,387
1913	2,820	516,062	30,032,517	851	98,171	2,331,969	697	57,252	4,828,357

**Lunatic Asylums**—The treatment of lunatics at asylums prevails on only a small scale in India, where insanity is less prevalent than in European countries. The census of 1911 showed an increase of nearly 22 per cent in the number of insane since 1901. The number admitted into asylums in 1913 was 2,327 as against 1,931 in 1912. The total asylum population of the year was 8,472. A new asylum has been opened in Bombay.

## The Tropical Diseases.

fect, and acts prejudicially to the working of the internal organs, especially those subserving digestion. A blast of cold air coming on the congested skin in the early hours of the morning must chill the surface, causing a sudden contraction of the cutaneous vessels, and tending to produce a rapid flux of blood to the deeper parts, inducing a congestion of the mucous membrane of the bowels and from that result the morning diarrhoea which is occasionally severe and exhausting such a state of affairs may become chronic, and so lead up to one of the chronic diarrhoeas which are a frequent cause of invaliding. Moreover a sudden congestion of the liver and spleen in a person who has had malaria, may be followed by a malarial hepatitis or splenitis, and repeated attacks of these conditions may result in permanent enlargement of these organs, or at any rate, in the case of the stomach and liver to derangement of function and so to chronic dyspepsia or inefficient manufacture of bile.

Again the chronic hyperæmia of the skin rounds the development of mura and macules. Hence the rashness of murgom or various forms from which Europeans frequently suffer. There are macules which, even in temperate climates, are found within the layers of the skin or on the surface. On account of the chronic congestion and moisture of the skin in tropical climates these macules not only become abundant but butyring, and hence the Boles which are often a serious affliction in the hot months. We frequently come across most distressing cases where the patient is covered from head to foot with them. When the boil comes to a head and softens it is easy to afford relief by opening each, and so relieving tension, but the worst kind is the "blind boil" which forms as we have just said, intensely painful and not coming to a head, and here an incision gives little relief. Fortunately we have in the vaccine treatment a most successful method, the vaccine used being either a stock one and generally acting like mazaie or, in a small percentage of cases, requiring to be made from the boils themselves. In still other cases the infection of the skin causes the formation of Carbuncles, which are more serious but require treatment on the same lines.

Another more common condition resulting from the congestion of the skin is *PERICARITIS*. This results from acute inflammation above the sweat glands and distention of their openings producing red papules and little vesicles, the size of pinpoints. The trouble is believed to result from the proliferation of a particular microbe in the skin, which alters the reaction of the perspiration. Be this as it may, inoculation of the skin is likely to take place through scratching, and so to the formation of boils. In some cases the skin is so intensely inflamed that the region of the shoulders and neck feels like leather, or the surface gives the impression of sand-paper. It is a serious condition in young infants, is

It is the primary scourge of the European in tropical countries, and is a most serious and fatal disease. It is caused by the action of the malarial parasites on the blood, and is characterized by a rapid flux of blood to the deeper parts, inducing a congestion of the mucous membrane of the bowels and from that result the morning diarrhoea which is occasionally severe and exhausting such a state of affairs may become chronic, and so lead up to one of the chronic diarrhoeas which are a frequent cause of invaliding. Moreover a sudden congestion of the liver and spleen in a person who has had malaria, may be followed by a malarial hepatitis or splenitis, and repeated attacks of these conditions may result in permanent enlargement of these organs, or at any rate, in the case of the stomach and liver to derangement of function and so to chronic dyspepsia or inefficient manufacture of bile.

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But it is obvious that in order to have the temperature of the body normal there must be increased flow of blood to the surface of the body, a state quite different from the conditions under which the organs of the Euro- pean have been trained. This favours those sudden chills to which Europeans are so sub- ject, and acts prejudicially to the working of the internal organs, especially those subserving digestion. A blast of cold air coming on the congested skin in the early hours of the morning must chill the surface, causing a sudden contraction of the cutaneous vessels, and tending to produce a rapid flux of blood to the deeper parts, inducing a congestion of the mucous membrane of the bowels and from that result the morning diarrhoea which is occasionally severe and exhausting such a state of affairs may become chronic, and so lead up to one of the chronic diarrhoeas which are a frequent cause of invaliding. Moreover a sudden congestion of the liver and spleen in a person who has had malaria, may be followed by a malarial hepatitis or splenitis, and repeated attacks of these conditions may result in permanent enlargement of these organs, or at any rate, in the case of the stomach and liver to derangement of function and so to chronic dyspepsia or inefficient manufacture of bile.

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To avoid the heat the European flies to the punkah. The electric punkah has been one of the greatest blessings introduced during recent years into Indian towns as its use in houses of sleeplessness which formerly wore out the temper and the mental energy of the European during the hottest months still this blessing is not without its attendant dangers. Most common are attacks of muscular rheumatism, sudden intermittent fevers, diarrhoea, and sometimes bronchitis or pneumonia. The electric punkah does away with the mosquito curtain, which does not conduce to the free circulation of air, and gives good ventilation in its place.

Finally, we have the effects of a continued high temperature on the working of the nervous system. As has been remarked by the late Lt-Col Crombie, M.S., (in a valuable paper on "The measure of physical fitness for life in the Tropics," to which the writer is much indebted), "In the tropics there is going on continually and unconsciously a tax on the nervous system which is absent in temperate climates. The nervous system, especially those parts of it which regulate the temperature of the body, are always on the strain, and the result is that in time it suffers from more or less exhaustion." The mean temperature of a European in India is always about half a degree higher than it is in a temperate climate, and it may be raised to 99° or 100° after severe bodily exertion. When, under the strain of a severe hot moist and sultry season, the heat-centre gives out, or as it is said is "inhibited," we have all the serious phenomena of HEAT STROKE. But in the less marked but long

## MALTAIRIA.

the body with an average of the red cells of the blood, and lives at their expense. It has two life-cycles, one within the blood of the human host (exogenous and sexual), and the first part of the sexual cycle is prepared for in the blood of the human host.

It is the blood of a patient to be taken from an "ignorant" person before the occurrence of the disease which attacks the commonwealth (typhoid fever) is in high power, or of the red corpuscles will be found to contain bodies composed of delicate protoplasm showing granules of dark pigment in their substance. These bodies are the parasites. The granules represent the result of the destruction by the parasite of the red colouring-matter of the blood-cells. The







[illegible]

## DYSENTERY

in the treatment of the bacillary form with an anti-typhoid serum in most bad cases and good results in the malarial form. In the malarial form the treatment is with quinine, and rightly so, on the use of Indian physicians in the malarial form. In the malarial form the treatment is with quinine, and rightly so, on the use of Indian physicians in the malarial form. In the malarial form the treatment is with quinine, and rightly so, on the use of Indian physicians in the malarial form.

## ABSCESS OF THE LIVER.

There are several varieties and causes of abscess of the liver but the term is applied in India to the single abscess which frequently forms as the result of amebic dysentery, the latter generally preceding but sometimes being concomitant with the formation of the abscess. It is one of the scourges of the tropics in India, and is especially to be dreaded on account of the high mortality. Taking all the cases together, including the acute and chronic and all classes of the community, the death rate is about sixty per cent, but this will probably be reduced by recent improvements in the methods of diagnosis and treatment. The latest annual report of the Sanitary Commissioner with the Government of India states that next to enteric fever, hepatic abscess is the most frequent cause of death among European troops, but the admissions and deaths on account of it have decreased greatly during recent years. The report also notes that the decrease in the number of cases of liver abscess is coincident with an equally steady fall in the number of admissions to hospital for alcoholism.

The disease is most liable to attack those who, in addition to having had an attack of dysentery, have indulged, not necessarily to excess, in alcohol and general good living, and are at the same time somewhat sluggish in their habits. It is often preceded by continued fever, malaria, dyspepsia, and more or less anæmia in the liver region, or the latter organ may be acutely enlarged and very tender in many cases the exact diagnosis is often a matter of acute difficulty.

The disease generally forms in the right lobe of the liver should its form on the left side it is especially liable to rupture into one of the internal organs.

The same complication may eventuate when the abscess forms on the right side. Here the principal point of rupture is into the right lung, the contents of the abscess being suddenly evacuated, in some cases without much warning, and nature thereby effecting a cure. Such a termination however is not desirable as hearting will take place quicker by surgical means.

There are some abscesses which are exceedingly insidious, it often happening that patients are sent home with a fever associated with general loss of health and weight, where the existence of a deep seated abscess may not even be suspected, but in which the symptoms of hepatic abscess suddenly occur and clear up the case, or the correct diagnosis may obtain itself by the sudden rupture as above described.

## PLAGUE.

Plague is a disease of very great antiquity, its ravages and symptoms have been described with remarkable accuracy by the old historians, such as Herodotus. Not many years ago it appeared to be a disease of historical interest only, but the present pandemic, which commenced about 1894, has made it a subject of the greatest importance to the inhabitants of the British Empire. It was in March 1894 that it first became prominent in Canton, and thereafter it spread to Hongkong, Malacca and Peshawar, and so along the whole of the Southern China Coast. It probably arrived in Bombay in March 1896, but it was not until the end of September that it became noticeable in that part of the native city known as "Mandai," in which the great grain supplies are so collected, and wherein consequently there is an enormous rat population. In October of the same year the presence of the pestilence was officially acknowledged. Everything which the limited knowledge of the subject at that time suggested, was done to check its spread, but, in spite of all efforts, the pestilence spread from the infected city throughout the greater portion of the Peninsula, and while its ravages of late years have not been so terrible as at first appeared, yet the disease still takes its annual toll of human life, and it has apparently become one of the endemic diseases of India. According to the official figures, Plague since its appearance has been responsible for more than seven and a half million deaths within the limits of the Indian Empire. These figures show perhaps by increased by the fact that the number of deaths is not included in the official figures, but it is a fact that the disease still takes its annual toll of human life, and it has apparently become one of the endemic diseases of India.

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As the case progresses, the primary ulcer will enlarge and become of an antr appearance, the bubo will also enlarge and the tissues around the inflamed lymphatics will be swollen and cedematous. To this variety the term "cellulocutaneous plague" has been applied. The spreading ulcer, which is really a local gangrene, has been described as the "carbuncle," these formations on the skin of those affected were often referred to by old historians as a prominent feature in many ancient epidemics.

The cases however are somewhat uncommon. The usual variety met with is the Acute Bubonic Plague. In this the patient is attacked with fever, and all the general symptoms of an acute infection, and on the first, second or sometimes the third day of the illness the characteristic bubo appears. The common reason that these glands receive the lymphatics from the lower limbs and from the lower portion of the trunk up to the level of the navel, a larger area than that drained by any other group of glands. Other sites for bubo formation are the armpits, the glands of the neck, those about the angle of the jaw and below the chin, and very rarely the ilio gland on the inner side and just above the elbow, and the small glands behind the knee joint. In some cases, generally in association with Buboes in the groin, the deep glands of the abdomen can be felt to be enlarged.

These Plague Buboes are of different kinds and it is a matter of some importance in connection with treatment and the outlook as regards recovery, to recognise the type of Bubo present in each particular case. The common variety is the "softening bubo." The enlargement is somewhat rapidly and the hard part welling gives place to a soft doughy mass around which is a limited amount of serous effusion into the subcutaneous tissues. If the patient will take a little day or two of rest and a cushion, or may give the experienced examiner the signs that the contents are of a fluid nature. On incision, pus and pus streaks are discharged and the bubo is enlarged, and under treatment the cavity, though large, will heal up within a week or so. When the softening bubo is allowed to rupture spontaneously a large amount of pus is discharged, such a bubo is not unfrequently encountered among the poor, who have not received adequate attention during the stress of a plague and one epidemic.

Another variety of bubo obtains when the glands ingame and harden, the inflammation being so acute that the blood supply of the part is obstructed and the whole of the affected area leaving a large superficial ulcer. These buboes are very numerous and are not bound to be between the lymphatics, as in the case of the softening bubo. To this and the term "indurated bubo" has been applied. Another variety, the "cedematous bubo," occurs in the neck and the armpits and in the serous effusion into the tissues around the glands, present to a less extent in the common type is the essential feature. The whole upper part of the neck may be distended by the accumulation of fluid under pressure and the glands of the neck may be pushed into a slow cedematous, but which is sometimes retarded by the formation of clots. In other cases however improvement starts about the fourth day, the temperature gradually falls, and the mind clears. The bubo subsides and the course and heals up, and the patient passes into a slow convalescence, but which is sometimes retarded by the formation of clots.

abscesses, boils, attacks of heart failure or of paralysis or ulcers of the vulva with infection of the whole globe and consequent loss of sight. Some recover with permanent mental impairment, or persistent tremors of the limbs with difficulty in speaking with clearness.

### Septicæmic Plague

This term is applied to certain forms of acute plague where buboes do not form, or where there is uniform but slight enlargement of glands in various parts of the body with symptoms of a general blood infection. The term is misapplied, inasmuch as most cases of bubonic plague are really septicæmic from the outset. These cases are either acute, ending in sub-acute with symptoms simulating typhoid fever, ending fatally in about a fortnight. In the acute cases large dusky patches of blood effusions beneath the skin, the so-called plague spots, are sometimes found, and there may be hæmorrhages from the stomach or bowels.

### Pneumonic Plague

In this variety the plague bacillus proliferates in the lung and causes rapid consolidation of large patches of the lung tissue scattered irregularly throughout the organs with considerable amount of œdema, so that the lungs are engorged with blood and large and heavy, and the bronchial tubes filled with reddish frothy sputum.

Dangue fever, otherwise known as Dandy fever or Breakbone fever, is rather common in India and is generally present in the larger towns, but as it appears in manifold forms and various writers describe it differently, its identity is not always recognised, and, therefore, by many medical men is thought to be less common than it really is. On occasions it gives rise to very wide-spread epidemics. In 1902 there was an extensive epidemic on the eastern side of the Indian Peninsula, and quite recently there has been a bad outbreak in Calcutta. It is more common during the rainy season.

The onset is abrupt, with fever, slight sore throat producing cough, rapidly of the pulse, sometimes a red rash which is so fugitive that it is often overlooked, and intense pain. These pains constitute the patient's chief complaint. They are generally pains in the bones, or in the small of the back, or in some of the joints either large or small. Sometimes there is no complaint of pain in the limbs, but there is intense pain behind the eyes, during which for three or four days, during which in rare cases there may be further symptoms due to the appearance of the patient's eyes. Sometimes there is intense shooting pain into the little finger. Though the intensity of the symptoms may give a very serious aspect to the case, yet a fatal issue is almost unknown. After the four days of intense suffering the fever subsides.

This is one of the most important diseases of India, having been endemic there for many hundreds of years. It is always present in the country generally from some crowded centre such as the site of a pilgrim, from which it is disseminated.

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### CHOLERA

There is no drug which will cut short the attack. From its likeness to rheumatism the salicylates are generally used, and perhaps relieve the pains. This drug should be combined with an ordinary fever reducing large doses of bromide should be given for the headache, and the exacerbating pains must be treated with morphine. It is often impossible to distinguish the malady from influenza until the appearance of the rash. It is believed that the poison is conveyed by the bites of a mosquito, and that this poison has characters which are analogous to the virus of Yellow Fever.

prolonged, in very rare cases there is a third attack. There is no drug which will cut short the attack. From its likeness to rheumatism the salicylates are generally used, and perhaps relieve the pains. This drug should be combined with an ordinary fever reducing large doses of bromide should be given for the headache, and the exacerbating pains must be treated with morphine. It is often impossible to distinguish the malady from influenza until the appearance of the rash. It is believed that the poison is conveyed by the bites of a mosquito, and that this poison has characters which are analogous to the virus of Yellow Fever.

### DENGUE FEVER.

sides somewhat abruptly, and at about this time a second rash appears, most marked over the shoulders and neck, and on the backs of the arms, or also an universal rash. It is of a dark red colour, often very ill the rash of scarlet fever, or it may be like that of measles. With its appearance the more severe symptoms subside. During convalescence the patient is much depressed, and the pulse remains unduly rapid. Sometimes also pain starts again in one of the joints, or he is crippled by stiffness of the back or of several of the joints. After a shorter or longer period, from two days to ten, a second attack of fever and pain comes on which runs the same course but as a rule less severe and prolonged, in very rare cases there is a third attack.

No serum or infection has so far proved of value in diminishing the mortality of the sick. Much can, however, be done by medical treatment. Absolutely rest is required and the patient should not even be allowed to sit up in bed. Drugs which act as heart stimulants are required almost from the outset, and irregularly these have to be administered by the skin as well as the mouth. The buboes should be fomented till they soften and incised as soon as fluid is formed. For the pneumonic condition the administration of oxygen gas gives relief. This can be obtained in India without much difficulty. Careful nursing is essential, and good nourishment must be given regularly in an easily assimilable form and complications have to be met as they arise. As regards prophylaxis at the British Medical Government Laboratories at Port, it may be said that the use gives a threefold chance of escape from attack and a reduction of case mortality by fifty per cent.

### Treatment of the Disease

one such case is liable to give rise to others of the same type.

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The disease has an infectious period of from two to seven days. After a premonitory diarrhoea, vomiting and loss of appetite, the patient generally takes place in the morning, though the temperature below normal, the heart weak, and cold, the skin bluish, the heart weak, and muffled, the extremities are blue and cold. In the evening the patient is restless, and the temperature rises. The patient is restless, and the temperature rises. The patient is restless, and the temperature rises.

The prevention of cholera lies in attention to water supply, and in boiling and filtering as a matter of routine in Indian life. All the discharges from the sick should be treated with disinfectants, and soiled clothing and linen destroyed. People who have to tour in cholera-stricken districts, or who go on shooting excursions, or who find themselves in the midst of a cholera outbreak should undergo inoculation with Haffkine's preventive vaccine. Two more intense in its effects. The temporary symptoms which may arise after the inoculation are sometimes severe, being almost more marked than after inoculation against typhoid, but the protection afforded more than makes up for the temporary inconvenience endured.

Infection seems generally to start in the cold weather. There is fever with rigors, and progressive wasting and loss of weight. The temperature chart is a curious one, the fever showing two remissions during the convalescent hour. Diarrhea is common, especially during the later stages of the disease. The spleen enlarges early and is generally of enormous size producing bulging of the abdomen. Formation of abscesses, which in many cases is fatal, is particularly liable to occur in the lungs. Death usually occurs from some intercurrent inflammatory condition, often pneumonia.

It is endemic in Assam, from which it has  
 invaded Bengal, and is now often seen in Cal-  
 cutta. It is also found in other parts of India, but  
 is rarely seen in Bombay, and  
 though it is said that the cases are import-  
 ed, it is very rarely seen in Hongkong, and  
 the only cases seen in Hongkong are those  
 which have been imported from India.

1. The first of these is the fact that the  
 2. Government has not yet decided whether  
 3. it will accept the offer of the  
 4. United States to purchase the  
 5. surplus of the Government's  
 6. surplus of the Government's  
 7. surplus of the Government's  
 8. surplus of the Government's  
 9. surplus of the Government's  
 10. surplus of the Government's

**Kala-Azar**

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organisms develop outside the human host as they seldom come up to standard quality, as they seldom come up to standard quality, and he adds "The few drugs that are not indigenous to India could easily be made to grow in some part or other of this vast land. The great advantage accruing from the systematic cultivation of drugs is that a regular supply of genuine drugs of standard quality is assured. The variation in the quality of wild-grown drugs is sometimes a very serious drawback to finding a profitable market for them. The quality of *Podophyllum Emodi* growing wild in India is an illustration in point. This plant was discovered by Sir George Watt in the year 1888, and it has been shown to be identical with the American drug that is being employed for pharmaceutical purposes, it still remains unrecognized by the British Pharmacopoeia, which, as explained by the "Chemist and Druggist," some time ago, is solely due to the uncertainty which still exists as to its physiological activity."

## DRUG CULTURE.

Two monographs on the cultivation of drugs in India, by Mr David Hooper, of the Indian Museum, Calcutta, and by Mr Purn Singh, of the Indian Forest Department, Dehra Dun, have lately been published. Mr Hooper, in his paper, states that one-half of the drugs in the British Pharmacopoeia are indigenous to the East Indies, and nearly the whole of the rest could be cultivated or exploited. The following are given as those that could be grown in quantity and as worthy of the attention of cultivators and capitalists —

Belladonna, most of which is still imported, grows well in the Western Himalayas from Simla to Kashmir, the Indian-grown plant containing 0.4 to 0.45 per cent of alkaloid.

Digitals is quite acclimatized on the Nilgiris, growing there without any attention. The Madras Store Department obtains all its requirements from Ootacamund, and the leaf has been found equally active to that grown in England.

Henbane is a native of the temperate Himalayas from 8,000 to 11,000 ft. It was introduced into the Botanic Gardens, Saharanpur, in 1840, and it has been steadily cultivated there up to the present time, and the products supplied to medical depots satisfy the annual demand.

Ipecacuanha has been raised with a small measure of success in the hilly parts of India, and it only requires care and attention to raise it in sufficient amount to make it commercially remunerative.

Jalap root grows as easily as potatoes in the Nilgiris, and there is no reason why the annual requirements (about 4,000 lbs) for the Medical Stores of Bengal, Bombay and Madras should not be obtained from Ootacamund.

Mr Purn Singh discussed the subject in a number of the "Indian Forester" in 1914. He states that most of the drugs in the British Pharmacopoeia grow wild in India, and that there is already a large export trade for some of them. He adds, however, that materials collected at

Mr Singh also points out that the Indian consumers of medicine depend mostly on herbs growing wild in the forests, the more important of these probably numbering at least 1,000. This inland trade is very large, the possibilities in the Punjab alone being put at Rs 60,00,000. He mentions saffron, liquorice, and saip as products exotic to India, whose cultivation in this country looks full of promise. Mr Singh suggests that a complete survey be made of the extent of the inland trade in medicinal products found growing wild in Indian forests in order to arrive at the figures of annual consumption, and that the forest areas where the most important drugs grow should be preserved. Inquiries should be instituted as to the best methods of cultivation, and if need be, the means of extending the artificial propagation. It is to provide data to induce the private capitalist to embark on such enterprises that Mr Singh advocates the formation of some body to go into the matter. He suggests that India is well worthy of attention by those in this country who are interested in extending the culture

of drugs in the British Empire. The Forest Department has already begun the cultivation of Indian podophyllum-root in the Punjab, United Provinces and the North-Western Frontier and several kinds of dried rhizome are sold annually for local consumption. Mr Hooper also shows that a start has been made in regard to the cultivation of belladonna, benzoin and digitalis. One of the principal difficulties to be overcome is to ensure a ready market, and there is also always the danger of overproduction to be considered.

### Essential Oils.

SANDALWOOD OIL is, by far the most important perfume product of India. The sandalwood tree is a root parasite, obtaining its nourishment from the roots of other trees. It grows best in loose volcanic soil mixed with rocks, and preferably in rich soil. Although in rich soil it grows more luxuriantly, less scented wood is formed, and at an altitude of 700 feet it is said to be totally devoid of scent. The best yield of oil is obtained from trees growing at an altitude of 1,500 to 4,000 feet, but the tree requires plenty of room so as to enable it to select vigorous hosts to feed it.

PALMAROSA OIL, also known as Indian geranium or "Turkish geranium oil" is another of the principal perfume products of India. It is derived from the grass, *Cymbopogon Martinii*, which is widely distributed in India, where it is known as "Mojra". Gingergrass is an oil of inferior quality, possibly derived from older grasses or from a different variety or the same species. Both oils contain geraniol, the proportion in palmarosa being from 75 to 95 per cent and in gingergrass generally less than 70 per cent. These oils are used in soap, perfumery, and for scenting hair oils and pomades.

LEMONGRASS OIL is derived from *Cymbopogon citratus* and *Cymbopogon flexuosus*. The former is a native of Bengal, and is largely cultivated all over India, but the oil distilled on the Malabar Coast and Cochim is derived principally from *C. flexuosus*.

VELVET, OR ORS-CUS, is a perennial grass, *Festuca zizanioides*, found along the Comandul Coast and in Mysore, Bengal and Burma, in most heavy soil along the banks of rivers. The leaves are practically odorless and only used for thatching and weaving purposes. The roots are used in perfumery and in the manufacture of mats and baskets.

THE MALABAR CARDAMOM, *Pipturus cardamum*, is the source of the seeds official in British and other Pharmacopoeias. Cardamom oil of commerce is, however, not distilled from *Pipturus* but from the high price, but is obtained almost exclusively from the long cardamom found growing wild and cultivated in Ceylon. The oil is used medicinally as a carminative and is also employed by perfumers in France and America.

COSTES ROOR (the root of *Sinuzura lappa*) is a native of Kashmir, where about 2,000,000 lbs are collected annually. It is exported in large quantities to China where it is used for incense. It is also used to protect shawls and the people of India has been Sir George Kings

### Manufacture of Quinine

Government Cinchona plantations were started in India in 1862 from seed introduced by Sir Clements Markham from South America, of which the plant is a native. There are two main centres, Darjeeling and the Nilgiri Hills. In both localities a portion of the area is owned by tea or coffee planters, and the bark they produce is either sold to the Government or exported. Several species of cinchona are cultivated in India, namely, *Cinchona succirubra* (red bark), *C. calisaya* and *ledgeriana* (yellow bark), and *C. officinalis* (crown bark). The commonest species in Darjeeling is *C. ledgeriana*, and in southern India *C. officinalis*. A hybrid form is also largely grown and yields a good bark. At the Government factories both cinchona bark and quinine are made. Thanks to these factories, practically no quinine is nowadays imported for Government purposes.

THE REPORT OF THE GOVERNMENT FACTORIES IN DARJEELING, 1915, shows a remarkable record of progress achieved since the Department was re-organized ten years ago. In 1905 the maximum annual yield from bark on the plantation fell short by 6,000 lbs of the annual demand which then stood at 15,000 lbs. To-day the output of the factory is 30,000 lbs of quinine possible, and on occasions the actual, annual production has increased from 1,737 acres to 2,552 acres. The annual possible harvest has increased from about 300,000 lbs of 2.5 per cent bark to 1,000,000 lbs of 4.5 per cent bark, and this quantity is assured for many years to come. The extraordinary efficiency of the factory plant has been raised from not more than 70 per cent to 95 per cent of the possible, this percentage of the possible, the manufactured cost of quinine has been reduced from Rs 9 to a little over Rs 1-10. One of the most interesting measures of the modern times for the benefit of the health of the people of India has been Sir George Kings

system of having quinine locally produced from cinchona, made up in 7-grain packets and sold (since 1886-7) for a quarter anna (one farthing) at every post office in India. This scheme has proved a commercial success, and has been of immense benefit to the inhabitants of fever-stricken tracts. In the year 1912-13, 10,694 lbs of quinine were sold at the post offices.

**The Quinine Ring**—A report issued in April, 1914 by the Superintendent of the Royal Botanic Garden, Calcutta, states—“Towards the middle of 1912 negotiations were commenced between the Java planters, who produce about 80 per cent of the world's bark and the European bark importers and quinine manufacturers with a view to an agreement as to the minimum unit price to be given for bark. The price of quinine in the bark had been going down steadily for a number of years and had reached a point that threatened the conversion of much cinchona land in Java into coffee, tea or sugar-producing areas. At present the negotiations between these bodies still drag on, but it seems probable that an agreement will be arrived at whereby, among other conditions, the minimum rate for bark will be raised to 5 Dutch cents per unit.” The quinine ring is now an established fact. The effect of this agreement may be far reaching. After less than a year's working the price for bark rose from the minimum of 5 cents imposed to 6.20 Dutch cents per unit.

and an article in *The Chemist and Druggist* for 6th November, 1913, gives the following details of the rise in price—“Some idea of the extent to which the price of quinine has risen is obtained by comparing the figures ruling three years ago with those of today. From January 1909 to April 1917 the German makers' prices remained stationary at 7½ p. oz., and in 1911 German brands in second hands sold as low as 6d., while Java quinine was down to 5½ p. oz., these being the lowest on record. The depreciation was due to three causes:—(1) unchecked bark-production, high average quinine-content of Java bark, and the failure of all efforts to bring about an understanding among the planters in July 1913 an agreement was arrived at, and a general improvement was effected from that time until August 1914 when the price of quinine supphate stood at 1s 1d and second-hand at about 1s 2½d. During the first two months of the war there was no speculation in the article but now a few daring operators have been buying and selling, some of them they are assisted by a number of smaller operators have made thousands of pounds per day, and never been more favourable from a “bull” point, and speculators have successfully availed themselves of it by driving up the price from 1s 4½d to 6s. The present price is so inflated that reaction is bound to follow, and at the time of writing the price has fallen to 4s, due to the Government having prohibited exportation.”





The following are the present Board of Trustees—The Hon'ble Mr C H Bonmpas, ICS, *Chairman*. The Hon'ble Mr C F Payne, ICS, *Chairman (ex-officio)*, The Hon'ble Raja Keshoo Case Law, OIE, elected by the Corporation. The Hon'ble Rai Radha Charan Pal, Bahadur, elected by the Ward Commissioners, Dr Charles Banks, elected by the Commissioners. They are appointed under Sec 8 (2) of the Calcutta Municipal Act, 1899. Mr W K Dods, elected by the Bengal Chamber of Commerce, The Hon'ble Rai Sitamath Rai Bahadur, elected by the Bengal National Chamber of Commerce, Sir B N Mukherjee, K OIR, Mr E H Stewart, OIR, the Hon Mr H J Hilary and Mr Anderson, appointed by the Bengal Government.

## The Board and their Work.

It was impossible to settle in advance the exact projects to be undertaken by the Trust. All details of these were, therefore, left to be worked out by the Trust after its constitution, Government exercising control by having all the individual schemes sent to them for approval before execution. The Trust did not enter the Municipal Corporation had previously dealt in some measure with the problems they were appointed to solve and the Trust started work with the initial benefit of this previous labour. Thus, the Corporation had aligned many roads and this work was useful to the Trust, though in some cases modifications were necessary.

The work upon which the Trust are now definitely embarked may be divided into three classes as follows —

1. The first of these is the fact that the Government has not yet decided whether it will accept the offer of the United States to provide a loan of \$100 million to the Government of India for the purpose of financing the construction of a new road from Calcutta to the port of Chittagong. This is a very important question, and the Government should decide it as soon as possible.

The fact is that the need for providing population, and still more important of providing for the growth of population and its improvement, by providing the necessary conditions of life, is of the greatest importance. When persons of the working class are displaced or likely to be displaced by the private enterprise does not undertake the work

"The Trust perceived at once that the problem of providing improved traffic facilities for Calcutta and its suburbs must be dealt with as a single problem and by a single mind. The first duty set by the Trust to their chief engineer Mr. J. P. Richards, M.I.E.E., &c., devoted his whole attention to this task and his report was issued early in 1914. Mr. Richards' report, which was accompanied by maps and numerous photographic illustrations, made a volume of 400 closely printed foolscap pages. He found Calcutta "a city which is in a very much more than ordinary bad way," and early discovered the serious fact that "the Calcutta Improvement Act of 1911 was almost useless for the great task set to the Trust." The Trust, was not contented under a local Housing Act, so that Calcutta and her suburbs cannot possibly be jointly improved, under the existing Improvement Act."

Mr. Richards' report deals with the general conditions of the city and the general policy of reform, with the general financial aspects and with the main programme of work. He discusses the Calcutta of to-day, showing the chief faults as to which improvements are required. A comparison is made between Calcutta and other cities, by way of illustrating Calcutta needs, and in this manner finance, roads and streets per square mile, road and street width, percentage of open spaces, tramway mileage per head of population, the status of the city as a port, and so on, are fully dealt with. An important chapter deals with the Calcutta slums and makes recommendations as to what should be done in regard to them. Another chapter discusses the general problem of city improvement and another is devoted to suburban planning and developments.

## Improvement Schemes.

The Engineer submitted early last year an interesting report on the widening of Howrah Bridge. Meanwhile, the Board undertook certain improvement schemes which would not be interfered with by any larger schemes adopted later. The Board also embarked on a re-housing scheme with a view to provide accommodation for persons likely to be displaced by the improved schemes under preparation. The buildings designed resemble those erected by the Bombay Improvement Trust. The scheme was sanctioned by Government in August, 1912, but its execution has proved more expensive than was anticipated, mainly owing to the use in the price of building materials. The following paragraph from the Calcutta Improvement Trust's first annual report shows the standard according to which they regard their re-housing plans —

result in the removal of bustees and the population in the sanitary measures of the Corporation, the health of Calcutta is only apparent, the census show that much of the improvement is of no importance, the figures of the last census show a serious problem in Calcutta is of





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Year Income

Rs

1908-09 1,20,16,030

1909-10 1,18,36,518

1910-11 1,28,26,171

1911-12 1,33,90,409

1912-13 1,42,46,17

1913-14 1,51,28,435

1914-15 1,41,30,809

The figures of income do not however indicate fully the expansion that has taken place in the operations of the Trust, because since the year 1902-03 up to the time of the present year the Commissioners reduced their rates and charges at various times

The expenditure during the last official year amounted to Rs 1,51,28,435. This is Rs 13 lakhs less than in the preceding year. The decrease in traffic in the port arising out of the war affected the revenue of the Trust to an average extent of about Rs 2 lakhs a month and in January, 1915 the Commissioners resorted to emergent measures of taxation to meet the situation

Various considerable improvements for the expansion of the port have recently been carried out to provide for the growth of trade. An important project recently undertaken was one for the lighting of the lower reaches of the Hughli with a view to their navigation by night. Considerable progress has been made with a new scheme for the extension of the docks. A special committee was appointed in England in 1913, to visit and inspect British and Continental ports with a view to advising the Commissioners in the light of the latest experience there on various points connected with new works

But these undertakings only belong to the outskirts of the main problem. The remedial measures of the Port Trust have proved beneficial, but they are insufficient to meet the ever-increasing requirements of trade. The question of the congestion at the Calcutta jetties and the absence of adequate transport facilities for the present volume of trade, has been engaging the attention of Government for some considerable time past. There has been a very great expansion of the trade of the port and a large increase in the number and tonnage of vessels entering it, and the lack of sufficient accommodation has resulted in serious delays to vessels and consequent loss, chiefly arising from the inadequacy of facilities for the discharge of cargo at the jetties

The Government of Bengal, in December 1913, appointed a Committee to investigate the important questions represented by the problem of the future development of the port. The Committee consisted of the Hon. Sir William Duke, Chairman, Sir Henry Burt, Mr. C. Shorrocks, the Hon. Raja Hrishikesh Lekha, Mr. A. G. Lyster, and Mr. H. E. Howard, members and Mr. R. N. Reid, I. C. S., Secretary

The Committee considered that the future expansion of the seaboard trade of Calcutta should take place in the neighbourhood of the docks. Their principle conclusions, in addition to their approval of the dock extension scheme, may be summarised as follows. A standing advisory Committee should be appointed in reference to the railway approaches and lay-out of the siding accommodation for the new dock system

At the same time, the Committee recognised the immense services rendered to the Port by the late Sir Fredrick Dumaque, during his tenure of office as Vice Chairman of the Port Commissioners, stating that the schemes of extension recommended were initiated under his auspices and that their inception is now possible as due to his foresight and to the gravity of the situation

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The Committee was empowered to—

(1) examine the existing traffic and port facilities in Calcutta and its immediate neighbourhood,

(2) investigate the present and future requirements of the trade of Calcutta, and

(3) determine the extent to which the various transport agencies shall provide new works and other facilities in order that these requirements may be fully met for as long a period as it is reasonable to prepare a forecast

The Bengal Government, in an explanatory announcement, agreed that the subject for consideration is one of wider range than an enquiry into the facilities afforded to the import trade at the jetties, and that it concerns rather the question whether proper facilities of all kinds are being provided to enable the port and railway authorities to deal promptly and adequately with the rapidly expanding trade of Calcutta in accordance with a well defined and carefully-though-out policy. There are several projects for improving transport facilities and which have been prepared at various times and which are now under consideration, such as the provision of new coal-bunkers on the Howrah side of the Hughli, the Grand Trunk Canal Project, the removal of the Itakhola jute mart and additions to the jetties. These projects are of the first importance and involve enormous expenditure and they should be right held, be examined and co-ordinated by a committee whose duty it would be to make an exhaustive enquiry into the requirements of the trade of the port and the means by which these requirements could be met

The Committee's report was published in March 1914. It approved of the new scheme already undertaken by the Port Commissioners for the extension of the docks saying "we are of opinion that the general layout of the scheme is suitable, and that it will ensure an ample margin for the expansion of trade which is likely to take place in any period that can reasonably be foreseen". The Committee said that "the main criticism to which the conception of these schemes was delayed until the great increase of trade during the last two years has shown only too conclusively how urgent they were required"

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an enormous monopoly as the control of the harbour front. These were resolved in 1860 given to Messrs Price, Willis & Reeves in 1903. The dock is oblong in shape, with two days at the north end. The total area of the wet basin is 45.2 acres, the length of quays, including the harbour wall, nearly three miles. There are 17 berths 500 ft in length. These berths are equipped with hydraulic cranes and transits shed accommodation varying from 3 stored sheds 400 ft long by 120 ft wide, to single stored sheds 400 ft long by 100 ft wide. Railway sidings run between the quays and the sheds, also behind the sheds. On the harbour wall there is a quay 3,000 ft long, equipped with hydraulic cranes and transits. The north end of this quay is intended for a troopship berth. Hydraulic power is used for working the cranes, dock gates, machinery, transits, sidings, etc. A floating crane to lift 160 tons forms part of the equipment of the dock. The dock entrance is through a lock on the south-west, parallel to which runs the new dry dock, a thousand feet long, a hundred feet wide, and with a sill thirty-four and a quarter feet below high water.

#### Ordinary neat tides

Outside the dock, beyond the entrance lock runs the new mole, a continuation of the south-west wall, alongside which ocean steamers may embark and disembark, their passengers direct from the shore, thus dispensing with the troublesome interposition of the tender. In the immediate vicinity of the landing pier, a customs house, refreshment and waiting rooms, post and telegraph offices and every facility the traveller can require are under construction.

The small Carnac basin, immediately north of the new dock, and formerly used by country craft, has been filled in, thus enabling a canal to be cut from the northern extremity of Alexandra Dock, and extending to Victoria Dock. The width of the canal will be 80 ft. Four berths will be provided to permit ships to lie at the wharves on either bank. The waterway will enable ships to be taken into any part of the Bombay dock area through the Alexandra Dock entrance. This will probably lead to the closing of the old dock entrances, with the result that ships will be saved much intricate handling and the Port Trust will be relieved of the necessity of expensive dredging operations.

The railway sidings and series of transit sheds in the new dock were planned according to the most modern principles of dock management.

The Sewri reclamation will chiefly be utilised for the accommodation of the export trade or cotton grain and seeds, which form the largest item in the traffic of the port. The old cotton green—or market—is situated at Colaba, at the extreme south-east end of the port and has long been greatly overcrowded, besides encumbering the end of the port. The new cotton green and godowns on the reclamation will cover about 166 acres, with 182½ acres available for future extension. The present greens and godowns at Colaba occupy 60 acres. Unloading sidings with accommodation for 700 wagons are to be provided, in addition to ample running lines, as compared with sidings to hold 154 wagons at Colaba at present.

Government purchased in 1870, on behalf of the Trust, the private forshore owners' rights, at a cost of Rs 75 lakhs, and at the same time reconstituted the Trust on a basis on which it has worked exceedingly well until the present day. The late King Emperor Edward VII, during his visit to Bombay in 1875, laid the foundation stone of the first large dock, which has since been known as Prince's Dock. This was opened in 1880, and thereafter the financial difficulties and the experience by the Port Trust dis-appeared. The construction of the Victoria Dock followed and recent years have provided an unbroken succession of surplus receipts into the treasury of the Port. Out of these profits charges on trade have been reduced wherever they pressed and the financial position of the Trust has greatly been strengthened by the building up of a large revenue, by the institution of sinking funds for the repayment of the whole of the existing debt and by liberal appropriations to depreciation accounts.

The trade of the port rapidly outgrew the accommodation provided at Prince's and Victoria Docks. The developments now in progress are the result and are estimated to provide for the requirements of the Port for another 20 years, or longer. The new schemes may be divided into four heads:

- (a) The construction of the Alexandra Wet Dock and Hughes Dry Dock, of which His Majesty The King Emperor laid the foundation stone during his visit to Bombay as Prince of Wales in 1906. His Excellency the Viceroy with Her Excellency Lady Harington, performed the opening ceremony in March, 1914.
- (b) The reclamation for the development of Port facilities of 583 acres, with a wharf frontage 2½ miles in length—an addition of some 4½ per cent to the area of the city—at Mazgaon and Sewri, beyond the present Docks at the extreme north of the harbour.
- (c) The building of a new railway leading from the main lines of the G. I. P. and B. & C. I., outside the city, to the Docks, in order to provide for more expeditious handling of heavy railborne traffic, and
- (d) The construction of a complete bulk oil installation at Sewri, at the north of the docks, with a deep-water pier.

The total estimated cost of the new dock and its equipment is Rs 6,15,05,469 or, say, Rs 41,00,365, cost of the Port Trust Railway, over 64 lakhs (£12,666), of the bulk oil installation, 22½ lakhs (£147,500), and of the reclamation and contingent works, Rs 388 lakhs, or, say, Rs 22,580,066.

[illegible]

**MADRAS.**

[illegible]

The following information are the extracts of  
 Port of Malacca—  
*On 21st*—The Hon'ble Mr Francis J. B.  
 (Collector of Customs) (continued)  
*On 22nd*—Mr W. L.  
 (Collector of Customs) (continued)  
*On 23rd*—Mr J. M. Lawrence  
*On 24th*—John M. Lawrence  
*On 25th*—John M. Lawrence  
*On 26th*—John M. Lawrence  
*On 27th*—John M. Lawrence  
*On 28th*—John M. Lawrence  
*On 29th*—John M. Lawrence  
*On 30th*—John M. Lawrence  
*On 31st*—John M. Lawrence  
 The corresponding

Besides hitting the B I S S Chupra Fort in their blinding factory and other buildings were damaged, the loss has been stated by the Chairman of the company, at a meeting of yesterday, filled tanks belonging to the Burnth were repaired at a cost of Rs 6,720. The Oil Company were completely destroyed and

## RANGOON

The personnel of the Commissioners for the port of Rangoon is comprised of the following thirteen members—  
 Appointed by Government—Mr George Cunningham Buchanan, B.C.I.T., M Inst C.E. (Chairman), Mr James Algonson Stevens (Chief Collector of Customs, Burma), Mr William Henry Dartton (Commissioner of Police, Rangoon), Commander Seymour Douglas, Valc, R.I.M. (Principal Port Officer, Burma), Mr William Henry Lawson (Deputy B.C.I.T.S. (President, Rangoon Municipal Committee), the Hon Mr Arthur William Rammie and Philip Henry Brown and Mr Henry Britten Hudson.  
 Elected by the Burma Chamber of Commerce—Messrs John Henry Polson (1st Chairman), Daniel Robertson, Walter Buchanan and John Moff.  
 Elected by the Rangoon Trades Association—  
 Mr Maurice Oppenheim  
 Officers of the Port—  
 Secretary—Mr J. Cowling (on leave)  
 Resident Engineer—Mr J. L. Johnson  
 Executive Engineer (River Conservation)—Mr E. C. Niven  
 Deputy Conservator—Mr H. C. Ashton (on leave)  
 Mr H. N. Gilchrist (officiating)  
 Traffic Manager—Mr E. H. Keeling (on leave)  
 Chief Accountant—Mr D. H. James  
 The receipts and expenditure on revenue account of the port of Rangoon in 1913-14 were as follow—

Receipts	Expenditure
Rs 43,38,270	Rs 41,84,773

The capital debt of the port fund at the end of the year was Rs 2,61,34,622

The total value of the trade of the port during the year was Rs 4,730.45 lakhs, as compared

## CHITTAGONG.

It has been recommended, that this port may be made over to the Assam-Bengal Railway and that funds required for its improvement should be provided by the Government of India out of their railway budgets. This proposal has the support of the Bengal Government and a report on the matter has been submitted to the Secretary of State. The Acting Agent of the Assam-Bengal Railway points out in this report that however valuable the Port of Chittagong might be to the Assam-Bengal Railway it should only be after the most careful consideration that the sum of over a crore of rupees already spent upon this port should be added to the Assam-Bengal Railway capital, since to do so would mean the further putting back of the prospect of

Chittagong, in Eastern Bengal, on the right bank of the Karaphuli river 12 miles from its mouth, was already an important place of trade in the sixteenth century when the Portuguese merchants gave it the name of Porto Grande. The construction of the Assam Bengal Railway has made it the natural outlet for the trade of Assam and part of Eastern Bengal. The chief business is the export of jute, which is baled at Narayang and either shipped thence by steamer to Chandpur and railed to Chittagong or dispatched direct in brigs to that port. Piecegoods, salt and kerosene oil are imported, and rice tea and hides are the principal exports. The total value of the exports in 1913-14 was Rs 3,232,463 and the total value of the imports in the same year was Rs 41,359.

Sir George Buchanan, in December 1913, proceeded to Basra, to advise the Government of India as to improvements at the mouth of the Shatt-el-Arab and elsewhere in that region. Sir George Buchanan, in December 1913, proposed to Basra, to advise the Government of India as to improvements at the mouth of the Shatt-el-Arab and elsewhere in that region. Sir George Buchanan, in December 1913, proposed to Basra, to advise the Government of India as to improvements at the mouth of the Shatt-el-Arab and elsewhere in that region.

therefore that the Government of India should take upon itself the whole of the responsibility for the expenditure required, which, he thinks, might rightly be done in view of the interest that the Government to be derived from improving the port. The procedure, he suggests, as at British India companies that that should be financed in the same way as the capital cost of the railway terminal facilities at the Port, together with the capital of the Port, together with the railway's paying dividends. He argues, is that the capital of the Port, together with the railway's paying dividends. He argues, is that the capital of the Port, together with the railway's paying dividends. He argues,

**VIZAGAPATAM HARBOUR PROJECT.**

The question of the creation of a harbour at Vizagapatnam to supply an outlet for a large area of fertile country hitherto undeveloped and with suitable access to the outside world has been lately brought to the fore through a report to the Bengal Nagpur Railway Company by their consulting engineer, Sir John Wolfe Barry and partner. This report, which was based on personal inspection, upholds the practicality of creating at no very extravagant cost, an inland harbour to which access would be maintained by two breakwaters projecting into the sea and by dredging a channel to the depth (in the first instance) of 24 feet. A deeper channel would be provided 1,500 feet in length with a possibility of supplying further accommodation in the future. It is understood that the question is meeting with sympathetic consideration on the part of the Indian Government though some doubt seems to exist as to the best measures for the furtherment of the object in view. It is pointed out that a port would have a beneficial influence on the development of a large area in East Central India seems unquestioned. It is pointed out that Vizagapatnam being as it does in front of the only practicable gap in the barrier of the Eastern Ghats is formed by nature to be the outlet of the Central Provinces from which a considerable amount of trade has taken this route in the past, even with the imperfect communications hitherto available. A necessary complement of the scheme would be the construction of the proposed railway by Barakpuram to Rajpur which with the existing coast line of the Bengal Nagpur Railway would make a large and rich area tributary to the proposed port and obviate the long and expensive circuit by Chhota. A link would also be supplied in the most direct route to Khammam from Europe by way of Bombay while from an inland point of view the possible provision of a fortified port on the town and almost unprotected stretch of coast between Colombo and Calcutta is held to be a consideration of great importance. The latter proposal is pointed out as other facilities for this purpose, and it also plays an important part in throwing the strain on the port of the Dolphin. No doubt it is pointed out that the port of the Dolphin is a great facility for the furtherment of the great import trade. The latter proposal is held to be a consideration of great importance. The latter proposal is held to be a consideration of great importance.

**BOY SCOUTS**

The Boy Scouts movement, initiated in England by Lt Gen Sir Robert Baden-Powell (the Chief Scout), has spread widely in India, and the Boy Scouts Association has received the patronage of the Viceroy and the heads of the local governments. The aim of the Association is to develop good citizenship among boys by forming their character—training them in habits of observation, obedience and self-reliance—inculcating loyalty and thoughtfulness for others—and teaching them services useful to the public and handicrafts useful to themselves.

The Boy Scouts *Gazette of India* published monthly, is the official organ of the Movement in India and in it are notified all official notices and orders issued by the Indian Headquarters. It is obtainable from the General Secretaries, Subscription Rs 2-8-0 per annum.

The following division of duties of the Indian Headquarters is officially published for information - The Assistant Chief Commissioner deals with all matters of Organisations and Diocline including the issue of Warrants to new Local Associations and Officers, also the registration of new troops which should be applied for on Form C obtainable from the General Secretary. Recommendations for awards of Life Saving Medals and Certificates should be made to him and also all applications for exemption from the swimming test for 1st class (Regulation 21) and all correspondence on the subject of Challenge Troops. Correspondence on the above subjects should be addressed to him at Fort William, Calcutta, by Local Secretaries, Districts through the District and Provincial Commissioners respectively. The General Secretary (Captain T. H. Baker, Railway Road, Langford), deals with

# Famine.

India there is now no such a thing as a food famine, the country always produces enough food for the whole of the population, and the task when it comes is a money famine, and the means for those afflicted by drought to earn enough to buy food. The machinery whereby this is done will be examined after we have seen the experiences through which it was evolved.

## History of recent famines

The Orissa famine of 1862-67 may be taken as the starting point, because that induced the first great and organised effort to combat distress through State agency. It affected 180,000 square miles and 47,500,000 people. The Bengal Government was a little slow in appreciating the need for action, but later food was poured into the district in prodigious quantities. Thirty-two million units were relieved (a unit is one person supported for one day) at a cost of Rs 95 lakhs. The mortality was very heavy, and it is estimated that a million people, or one-third of the population in Orissa alone died in 1866, and the famine in Western India of 1868-70. The latter famine introduced India to the great migration from Marwar, which was such a distinguishing feature of the famine of 1896-1900, it is estimated that out of a total population of a million and a half in Marwar, one million emigrated. There was famine in Behar in 1873-74, then came the great South Indian famine of 1876-78. This afflicted Madras, Mysore, and in the second year extended to parts of the Central and United Provinces and to a small tract in the Punjab. The total area affected was 257,000 square miles and the population 58,500,000. Warned by the excessive expenditure in Behar and actuated by the desire to secure economy, the Government relief programme was not entirely successful. The excess mortality in this famine is said to have been 6,250,000 in British territory alone. Throughout British India 700,000,000 units were relieved at a cost of Rs 84 crores. Channabai contributed from Great Britain and the Colonies aggregated Rs 84 lakhs.

## The Famine Codes.

The experiences of this famine showed the necessity of placing relief on an organised basis. The first great Famine Commission which sat under the presidency of Sir Richard Strachey, elaborated the Famine Codes, which amended to meet later experience, form the basis of the famine relief system to-day. They recommended (1) that employment should be given on the relief works to the able-bodied, at a wage sufficient for support, on the condition of performing a suitable task, and (2) that gratuitous relief should be given in their villages or in poor houses to those who are unable to work. They recommended that the food supply should be left to private agency, except where that was unequal to the demands upon it. They advised that the land-owning classes should be assisted by loans, and by general suspensions of revenue in proportion to the crop failure. In sending a provisional

Famine in India is the inevitable accompaniment of economic conditions which leave the bulk of the people dependent on the soil for their means of livelihood. It is intensified, because the produce of the soil over the greater part of India is dependent on a short rainy season, and the rains are erratic and subject to violent fluctuations. It falls with exceptional severity on India because the soil is divided into a multitude of petty holdings, titled by people without any capital, living for the most part from hand to mouth, and amongst whom credit ceases to exist as soon as the rains fall. In other agricultural countries there are good seasons and bad, but there is none other, with the possible exception of China, where in a famine year millions of acres may not yield so much as a blade of grass, except under artificial irrigation. The conclusion to be drawn from these conditions is that for many years to come India must be susceptible to famine. The shock of famine may be mitigated by the spread of railways, by the development of irrigation, the growth of manufacturing industry, and the improvement of rural credit. There is evidence that all these forces are tending greatly to reduce the social and economic disturbance caused by a failure of the rains. But they cannot entirely remove it.

## Famine under Native Rule

At one time there was a general tendency to attribute famine in India entirely to the effect of British rule. In the golden age of India, we were told—whenever it may have been—famine was unknown. But India had been drained of its resources of food by the railways, the people had been impoverished by the land revenue demand, and the country as a whole had been rendered less capable of meeting a failure of rains by the "Drain." These causes by the Home Charges (qv) had fallenacies have disappeared under the inexorable logic of facts. A better knowledge of Indian history has shown that famines were frequent under Native rule, and frequent when they came. "In 1630," says Sir William Hunter, in the History of British India, "a calamity fell upon Gujarat which enables us to realise the terrible meaning of the word famine in India under Native rule. Whole acts and districts were left bare of inhabitable." In 1631 a Dutch merchant reported that only eleven of the 260 families at Surali survived. He found the road thence to Surat covered with bodies, decaying on the highway where they died, there being none to bury them. In Surat, that great and crowded city, he could hardly see any living persons, but the corpses at the corner of the streets lie twenty together, nobody burying them. Thirty thousand had perished in the town alone. Famine followed." Further his evidence was adduced by Sir Theodore Morrison, in his volume on the Economic Transition of India. The "Drain" theory has been exploded. It has come to be seen that whilst railways have checked the old-fashioned practice of storing grain in the villages, they have made the reserves, where they exist, available for the whole of India. In



Three points soon emerged from the general revenues. As if crops annually, or one million sterling. The first charge on this grant is famine relief, the second protective works, the third the avoidance of debt. The chain of protective railways is now practically complete. Great progress is being made with protective irrigation. Acting on the advice of the Irrigation Commission (qv) an elaborate programme of protective irrigation works is being constructed, particularly in the Bombay Deccan—the most famine-susceptible district in India—and in the Central Provinces. When these are completed, the shock of drought will be immensely reduced.

### The Indian Famine Trust

Outside the Government programme there is always scope for private philanthropy, especially in the provision of clothes, help for the superior class poor who cannot accept Government aid, and in assisting in the rehabilitation of the cultivators when the rains break. At every great famine large sums have been subscribed, particularly in the United Kingdom, for this purpose, and in 1899-1900 the people of the United States gave generous help with the idea of providing a permanent famine fund, the Maharaja of Japur gave in 1900 a sum of Rs 16 lakhs, in Government securities, to be held in trust for the relief of the needy in time of famine. This Trust has now swollen to Rs 28 lakhs, chiefly from gifts by the round-croft family. It is vested in trustees drawn from all parts of India, and is freely used in an emergency. Substantial grants were given for the Bombay relief fund in 1911, and for the relief of the distress in Ahmednagar (Bombay Deccan) in 1912. The report of the Trust for 1914 states that it forwarded Rs 1,000,000 to the Government of the United Provinces applied for a preliminary grant-in-aid of Rs 50,000 with the object of alleviating the distress caused by the unavoidable nature of the monsoon. The application was considered and sanctioned. It met the second grant the Board found it necessary to sell Government investment for Rs 1,100 out of the temporary investment.

### Famine Protection

High prices of produce have given the cultivators considerable resources, the extension of irrigation has protected a larger area, and labour has become more mobile, utilising to the full the increasing industrialism of the country. For instance, in 1911 the rains in Gujarat failed completely, yet there was little demand for relief works, and the necessities of the cultivators were rather for fodder for their cattle than for money or food for themselves. Various schemes are now under consideration for the establishment of fodder reserves in the villages.

side by side with the perfection of the machinery for the relief of famine has gone the development of famine protection. The Famine Commission of 1880 stated that the best, and often the only means of securing protection from the extreme effects of famine and drought, are railways and irrigation. These are of two classes, productive and protective. Productive works being estimated to yield profits which will pay interest and sinking fund charges are met from loans, protective works, which do not pay, directly from revenue in order to guarantee that there should be continuous progress with protective works. The Famine Insurance Grant was instituted in 1876. It was decided to set apart from the

The statement shows in detail of the investment of the Trust as at 31st December 1914 that the Endowment Fund invested in Government securities vested in the Treasurer of Charitable Endowments as in the previous year was Rs 28,10,000, Government Securities representing assets temporarily invested stood at Rs 7,02,000. The sales during the year amounted to Rs 1,100 leaving a balance at the close of the year of Rs 6,60,600. This with cash in current account in the Bank of Bengal stood at Rs 1,11,744-8-8 leaving a total available for expenditure of Rs 7,72,344-8-8 to Rs 1,32,744-8-8.





is it is clear that it is not facility for obtaining cheap capital alone which will raise the agriculturist and relieve him from his debts, but the provision of capital combined with the inculcation of habits of thrift and self-help. The Commission also recommended that the principal means of resisting famines was by strengthening the moral backbone of the agriculturist and it expressed its view that the introduction of co-operation in rural areas might be useful in securing this end.

### Co-operative Credit Societies' Act—These

recommendations induced Lord Curzon to appoint a Committee with Sir Edward Law at its head to investigate the question and a Report was submitted to Government recommending that Co-operative Societies were worthy of every encouragement and of a prolonged trial. We are at the same time making experiments on Sir Anthony (now Lord) Macdonnell and others were at the same time making experiments on similar lines in the United Provinces and the Punjab with satisfactory results. All these activities, however, took a practical shape only when Lord Curzon, with his zeal for getting things done which made him famous in India, took up the question in all earnestness and his Government introduced in the Supreme Legislative Council a Bill to provide for the constitution and control of Co-operative Societies. The main provisions of the Bill which became the Co-operative Credit Societies' Act (Act X of 1904) were—

(1) That any ten persons living in the same village or town or belonging to the same class or caste might be registered as a Co-operative Society for the encouragement of thrift and self help among the members.

(2) The main business of a Society was to raise funds by deposits from members and loans from non-members, Government and other Co-operative Societies, and to distribute money thus obtained by way of loans to members or with the special permission of the Registrar, to other Co-operative Credit Societies.

(3) The organization and control of Co-operative Credit Societies in every Presidency were put under the charge of a Special Government Officer called the Registrar of Co-operative Credit Societies.

(4) The accounts of every society were to be audited by the Registrar or by a member of his staff called the Auditor of Co-operative Credit Societies.

(5) The liability of a member of a Society was to be unlimited in the case of a Rural Society.

(6) No dividends were to be paid on the profits of a rural society, but the profits were to be carried at the end of the year to the Reserve Fund, although when this fund had grown beyond certain limits fixed under the bye-laws, a bonus might be distributed to the members.

(7) In the case of Urban Societies no dividend was payable until one fourth of the profits in a year were carried to the Reserve Fund.

Soon after the passing of the Act the local Governments in all the Presidencies and major provinces appointed some of their best officers as Registrars with full powers to organise, provide and control the management of Societies in all the Presidencies and major provinces except a registered society.

**New Act Introduced—**As co-operation progressed in the country defects were noticed in the Co-operative Credit Societies' Act and these were brought to the notice of Government by the Provincial Conferences held under the auspices of Local Governments in various Presidencies, as well as by the Annual Conferences of the Registrars. In two directions the need for improved legislation was especially felt. In the first place, the success or credit societies had led to the introduction of Co-operative Societies for distribution and for purposes other than credit for which no legislative protection could be secured under the then existing law. And in the second place, the need for a free supply of capital and for an improved system of supervision had led to the formation of various central agencies to finance and control the original credit societies and these central agencies run all the risks attendant on a status unprotected by legislation. The Government of India, recognising the need for removing these defects, decided to amend the old Act and a Bill embodying the essential alterations proposed was introduced in the Imperial Legislative Council, and after a few amendments it emerged from the Council as the Co-operative Societies' Act (II of 1912) replacing Act X of 1904. The outstanding features of the new Act were as follows—

(a) It authorized the formation of societies for purposes other than credit, which was possible under the old Act only with the special permission of the Local Government. This extension of Co-operation to purposes other than credit marks an important stage in its development in India.

(b) It defined in precise terms the objects for which Co-operative Societies could be organised.

(c) It removed the arbitrary division of societies into Rural and Urban.

(d) It facilitated the growth of sound central agencies by insisting on a limited liability by means of a special clause about the registration of a society one of whose members is a registered society.

(e) It empowered the Local Government to frame rules and alter bye-laws so as to put restrictions on the dividends to be declared by societies and allowed them the discretion to sanction distribution of profits in the case of unlimited liability societies to their members.

(f) It allowed societies with the permission of the Registrar to contribute from their net profits, after the Reserve Fund was provided for, amounts up to 10 per cent of their remaining profits to any charitable purpose as defined in the Charitable Endowments' Act. This kept the movement in touch with local life by permitting societies to lend assistance to local educational and charitable institutions.

(g) It prohibited the use of the word "Co-operative" as part of the title of any business concern except a registered society.

— constitution of Agricultural Societies —

It is not a simple matter to determine the profits of the various branches of the business. The profits of the various branches of the business are determined by the various factors which enter into the production of the various goods and services. The profits of the various branches of the business are determined by the various factors which enter into the production of the various goods and services.

Internal Management of Societies — The

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In 1901, the total population of the Province was 21,137,000,000. The population of the Province in 1901 was 21,137,000,000. The population of the Province in 1901 was 21,137,000,000.

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If necessary, a new chairman and secretary is elected. The general meeting elects the borrowing limit of individual members lays down the maximum amount upto which the Managing Committee may borrow during the ensuing year, disposes members for misconduct or serious default and settles the rates of interest for loans and deposits. As these meetings are informal, other local topics of public utility are sometimes discussed. All the net profits of the society are annually carried to the Reserve Fund, which is indivisible, that is, incapable of distribution as dividend or bonus, which cannot be drawn upon without the sanction of the Registrar, and which must be invested in such a manner as the Registrar prescribes. It is intended to meet unforeseen losses and to serve as an asset of security in borrowings. Except in the Central Provinces and Madras, the Reserve Funds of primary societies are generally utilised as an addition to their working capital though steps are being taken in some places of the country to stop this practice and apart from the working capital and invested deposits in reliable Central Banks. The Government of India state in their Resolution of 1914 "that while there may be advantages in the earlier stages in using the Reserve as part of the working capital of the society, it should gradually, as it becomes more important, be set apart for separate investments." The amount of the Reserve Fund of agricultural societies is roughly 2½ in 100 of rupees and forms 5 per cent of their total liabilities, and with the addition of the last year's profits, to be carried to Reserve, 12 per cent of the total outside capital of the societies including members' deposits.

**Progress of the Movement**—The following statement shows the progress of agricultural societies up to the end of the fiscal year 1913-14.

Provinces	Number of Societies	Number of Members	Total Working Capital	Reserve Fund	Net Profit during the year 1912-13	Usual Rate of Interest on Loans
Madras	1,256	77,902	55,79,926	2,59,316	1,17,740	9½
Bombay	584	40,470	28,52,119	1,44,967	87,252	9½
Bengal	1,547	71,282	44,11,613	3,31,471	1,54,362	15
Bihar and Orissa	706	17,270	13,43,297	88,191	71,904	15½
United Provinces	2,360	99,891	50,71,014	2,30,688	1,25,878	15
Punjab	3,261	155,250	1,30,46,019	8,95,271	6,30,888	12½
Burma	1,214	29,889	32,65,894	2,81,824	1,88,884	15
Central Provinces	2,087	34,313	25,76,239	77,145	53,482	12
Assam	254	11,536	2,90,837	40,091	19,364	12½ to 18½
Cooch	31	2,830	1,02,493	6,113	21,455	12
Ajmer	382	10,887	7,35,611	15,396	11,520	9 to 12
Allypore	410	21,875	7,00,120	11,638	11,520	9½
Baroda	246	9,918	4,23,807	43,220	24,343	
<b>TOTAL</b>	<b>14,538</b>	<b>509,822</b>	<b>4,04,01,680</b>	<b>24,55,218</b>	<b>15,21,486</b>	

The progress of the movement in different provinces varies according to the activity in the activity in agricultural societies. In fact as in the case of agricultural societies where every member may be expected to know every other member. Their constitution is based on the 'Schulze Delitzsch' model and in most cases the management is honorary, though sometimes, when the sphere of society's work is extended, a paid staff is employed. There is in all societies a substantial share capital, payments being made in instalments, and the rest of the working capital is obtained by local deposits from members and others and loans from co-operative and joint stock banks. At the end of every year, one-fourth of the net profits must be carried to the reserve fund and the balance may be distributed as dividend or bonus. There are a few serious drawbacks in the working of these societies and complaints about them are noticeable in many of the Registrar's annual reports. The most serious of these complaints are that the spirit of co-operation is lacking in many non agricultural societies, that there is too great a desire to go in for profits and dividends and a growing tendency to make the societies close preserves.

**Non-agricultural societies**—Just as rural societies are the means of resuscitating the agricultural and other small village industries, agricultural societies called the non-agricultural societies has grown in towns and cities for improving the economic and moral condition of artisans and small traders, members of particular caste and employees and of firms and government departments. These societies have usually a limited liability. This is due to the field of their work not being com-



agricultural societies or through the medium of District Central Banks. A large number of prosperous non-agricultural societies, as stated above, could afford to lend to agricultural societies. Government aid was also freely given and the advances under this head rose from Rs 2,84,718 in 1906-07 to Rs 9,34,603 in 1911-12 and Rs 11,46,020 in 1913-14. With the progress of the movement, however, this aid was discontinued and the only Provincial which continued the practice was Bombay. It continued the practice until 1911-12, when it was discontinued and the refusal of the Banks in the Presidency and the refusal of the Commercial Banks, though constantly approached, to help agricultural societies. When, owing to the unwillingness of the ordinary Banks to participate in the movement, the Registrar found it extremely difficult to have even the small number of societies in the Presidency properly financed, Sir Vithaldas Thackersey and the Hon. Mr. Lalubhai Samaldas submitted to Government a scheme to establish a Central Bank for the Presidency, provided certain assistance was promised by Government. As a result of the negotiations that followed, the Bombay Central Co-operative Bank was founded in October 1911, with a share capital of Rs 7 lakhs and with power to issue debentures at 4 per cent up to three times the amount of the paid-up share capital, the Government guaranteeing payment of interest on the debentures till their repayment. The Bank was authorised to lend only to registered co-operative societies in the Presidency with the previous sanction of the Registrar in the case of every individual loan. As an indirect result of the establishment of the Bombay Central Bank a number of District Banks have since been started in the Presidency.

The drawback of the Bombay and the Madras Central Banks is that neither is a co-operative Apex Bank in the true sense of the term, as there are no District Central or Agricultural Societies that are members of, or affiliated to, it, and therefore interested in its success. A Provincial Bank with three Central Banks affiliated to it is in existence in Upper Burma and this Bank finances primary societies either through the affiliated banks or through the guaranteeing or supervising unions composed of societies. An Apex Bank has recently been started in the Central Provinces to form an immediate link between the District Banks in the Province and the Commercial Banks in Allahabad and elsewhere. It has worked well and its success led to the establishment of a Provincial Bank with a similar constitution in Behar and Orissa. A scheme has also been set afoot for having a Provincial Apex Bank in Bengal, whereas also in Bihar and Orissa, the primary societies are at present financed by Central Banks in district or taluka head-quarters. In the United Provinces many societies are financed on the same system, and there too a Provincial Apex Bank under process of formation. The Punjab has a Central Banking system and though sooner or later it, too, will have an Apex Bank, no definite proposal for the establishment of such Bank has yet matured.

seed, manure and agricultural implements, and improvement and sinking of wells, purchase of new lands, and personal maintenance in times of scarcity in the case of agricultural societies, and for purchase of raw materials for industries, for trade, for house-building and for food and other necessities of life in the use of non-agricultural societies. The terms of the loans are one year or less on those for current needs whether for agriculture or poultry, and up to five years or so on loans for liquidation of old debts or for land improvement. The percentage of the loans repaid by the members in 1913-14 for the total amount advanced in 1913-14 to the total amount of loans outstanding in 1912-13 and advanced in 1913-14 was 29.6 the average for the last four years being 31 per cent. In unsatisfactory feature of the co-operative system in some of the Provinces is the heavy and unimmutably in the matter of repayment of loans by members and a general apathy in the matter on the part of societies. The amount of loans overdue from members at the end of the year 1913-14 stood at 13 per cent of the total outstanding due to societies. As co-operation is both financially and educationally a failure unless promptitude of payment is ensured, no efforts are spared by organizers to educate societies in this respect. The Co-operative Societies' Act grants to societies priority of claim against other creditors (except the State or the landlord) to enforce any outstanding demand due to the societies from other agricultural produce, and upon the cattle, fodder or agricultural implements, in cases where loans have been advanced for the purposes specified. But not content with this, some co-operators have pleaded for special powers of recovery of loans under which overdue loans may be recovered as arrears of land revenue. Most local Governments have framed rules under the Act enabling the Registrar to refer disputed claims to arbitration and to enforce the award of the Registrar in the same manner as a decree of the Civil Court. No local Government is likely to grant nor the Government of India to sanction a special process under which claims against defaulting members may be recovered according to procedure allowed for the recovery of arrears of land revenue. For the existence of a special privilege of this character cannot but lead to laxity in the selection of members and carelessness in the granting of loans.

**The Financing of Agricultural Societies**—As soon as the initial stage of the movement had passed, a very urgent problem had to be faced. This was to finance the agricultural societies that were growing in all directions. And the problem was solved in different provinces according to the special conditions and the stages of development the movement had attained therein. In Madras a Central Bank, which lent to Co-operative Societies, was started without Government aid as early as in 1907. This was followed by the starting of banks at district head-quarters. In other Presidencies, District Banks were established making good the deficiency in the local capital of the societies within their districts, and in some places Joint Stock Banks were persuaded to make advances direct to agricultural societies. The terms of the loans were established making good the deficiency in the local capital of the societies within their districts, and in some places Joint Stock Banks were persuaded to make advances direct to

The Working of Central Societies—The following statement shows the number and the constitution of the central societies in the country up to the end of the year 1912-13.

Provinces	Number of Societies	Number of Members	Total Working Capital	Reserve Fund	Net Profit during the year 1912-13	Usual Rate on Loans to Societies
Madras	16	1,173	52,19,360	74,028	87,728	7 1/2
Bombay	6	1,682	18,13,360	0,239	29,824	7 to 8
Bihar & Orissa	12	1,142	8,05,221	14,863	28,421	12 1/2
United Provinces	35	12,030	59,09,745	3,11,477	1,40,170	12 1/2
Punjab	38	2,179	41,35,082	33,358	90,454	8
Burma	96	2,748	26,37,114	29,528	62,412	9
Central Provinces	38	6,131	38,17,007	40,263	75,776	7 & 9
Assam	9	421	1,09,929	5,449	0,006	9
United Provinces	3	775	7,50,324	7,173	23,025	10
Madras	11	197	1,40,315	2,111	9,041	7 1/2
Bombay	3	176	1,20,806	443	715	6 1/2 & 9
Total	329	34,710	2,90,37,180	5,60,790	6,48,577	

These figures include five Banks which may be treated as Provincial Banks, one Central Bank in Burma, 220 Central Banks and 103 guaranteeing and supervising Unions. The constitution of Central Banks is not uniform, but the existing Banks may be classified under three general heads—(1) Banks or which the membership is confined to individuals or where societies are admitted as members on the same footing as individuals, (2) Banks of which the membership is confined to Societies, and (3) Banks which include Societies and individuals as their members and secure to Societies separate representation on the Board of Directors. The number of Central Banks in the various Provinces (exclusive of Native States) falling under each of the three classes described above are approximately as shown below—

	(1)	(2)	(3)
Madras	4	1	2
Bombay	3	6	24
Bihar & Orissa	1	11	11
United Provinces	14	41	41
Punjab	20	12	6
Burma	2	2	23
Central Provinces	2	4	4
Assam	2	2	2
United Provinces	21	42	126
Total	71	126	126

**Functions of Central Banks.**—The funds of Central Banks are to balance the funds of Societies and to supply capital. But their duties should not be limited to the provision of banking facilities only, but should include the inspection and supervision of so-

It may be mentioned that in 1912-13, the total of central societies in the country was 329. The total of central societies in the country was 329. The total of central societies in the country was 329.

of such bodies has been facilitated by the amended Co-operative Societies Act, which came into force in 1912. Previous to the passing of this Act, Central Societies were started unsystematically in various Provinces according to local ideas, but their formation has been made uniform by the new Act. In-coming on a limited liability, in the case of a society of which a member is a registered society. As stated above, an important class of institutions included under the statistics of Central Societies are unions which may be described as federations of societies, which are maintained for superintending or controlling the accumulation of surplus of loans to primary co-ops. These unions, which function in the country, have been organized under a banking scheme. There are 126 such unions in the country, Burma, Assam, Bengal, Madras, and Assam.

## Store Societies.

system has properly developed, the Directors of the Central Bank either themselves or through a paid agency organise societies and, as stated above, supervise their working. The number of honorary workers is steadily increasing and in some Presidencies there is a body who regularly assist the Registrars. There is, however, scope for Organisation on Societies on the lines of similar institutions in England and Ireland and if the District Banks and Unions are affiliated to a Co-operative Provincial Apex Bank, it may be possible to have an Organisation Department of the Bank with branches in the districts.

**Store Societies**—After the passing of the new Co-operative Societies' Act the application of co-operation to purposes other than credit was greatly extended, but as yet there has been no general demand for productive and distributive co-operative societies. At the end of the year 1913-14, there were very few store societies in the country, the Madras Presidency claiming 10 of these with a membership of 4,404 and a working capital of Rs. 2,40,280. An important industry which flourished in India before the introduction of machinery was the Handloom Weaving Industry, and efforts have been made to revive it by the formation of productive co-operative societies of handloom weavers. The 'Weavers' Societies are not merely credit societies, but undertake the purchase of good yarn for members and in some cases have earned for members and in some cases have the prospect of other forms of co-operation in the country.

The other Productive Societies are those for 'Guanoes' or milkmen, dyers, basket and press workers in the Central Provinces and Assam; and 'dhoro' in Bombay. These are also building societies in Madras, a zamindari society in Bengal, and a Sugar Factory working on co-operative lines in Benares. A Housing Society has been started in Bombay and a Housing Association has been founded to encourage the formation of more such societies. There are a few dairy societies, the most well-known of these being those at Lucknow and Benares. Burma possesses a novel type of societies for the sale of paddy, having 63 such societies. It is also a pioneer in the matter of co-operative insurance, and has 59 Cattle Insurance Societies with a membership of 1,089. Nine Cattle Insurance Societies have also been started in Coorg and 1 in the United Provinces. The total number of non-credit societies, whether agricultural or non-agricultural, is only 249. The following table exhibits the different parts of the country.

Type or Society		GRAND TOTAL									
		Purchase or Production and Sale		Production		Production & Sale		Insurance		Others	
		(Non-Agricultural)	(Agricultural)	(Non-Agricultural)	(Agricultural)	(Non-Agricultural)	(Agricultural)	(Non-Agricultural)	(Agricultural)	(Non-Agricultural)	(Agricultural)
Madras		10	27	1	11					5	6
Bombay										2	4
Bengal						1	1			3	4
Bihar and Orissa		2	5			1	10			1	17
United Provinces											
Punjab											
Burma										6	122
Central Provinces										1	5
Assam											
Coorg										9	9
Ajmer											
TOTAL		63	111	1	22	6	10	78	69	10	249

**Agricultural Co-operation**—Agricultural societies have until recently been engaged only in supplying cheap credit to their members but there are various other fields of work to which they may extend their activities. Grain Banks may be started with advantage, receiving deposits in kind and allowing these to accumulate to be sold at profitable rates or distributed to the members in times of scarcity. Such Banks have been started in Bombay and Madras. Societies on a similar principle for the storage of fodder may assist in solving what is likely to become in the near future an important problem in rural economy. Another direction in which the co-operative societies for purchase of and distribution among members of good unadulterated seed, a number of small seed societies have been organised in the Bombay Presidency and in the Central Provinces. Societies for the co-operative purchase and sale of manure will also prove







take a lively interest in the internal work of their societies. There are a few cases where a society has set its face against drunkenness, expelled members notorious for their intemperate habits and has in other ways worked for a better morality by insisting on a high standard of life. Societies have occasionally expended on marriages, and even heavy expenditure on members to the habit of thrift. Liquidation of old debts again has been rendered possible to a great extent and many an agriculturist who was formerly in a state of chronic indebtedness has been relieved of all his debts and freed from the necessity of incurring new ones. Credit has been much cheapened and it is now possible for the agriculturist to borrow at 9 to 18 per cent what he could not borrow at less than 20 to 25 per cent formerly. It has been calculated that in interest alone the agriculturists of India, by taking loans from co-operative credit societies instead of from the village money lenders, are now saving themselves from an unnecessary burden of at least 20 lakhs of rupees. The village rate of interest have naturally gone down considerably and the farmer has been inculcated with the beneficial result that the agriculturist has learnt to conduct his own work more efficiently. Thrift has been encouraged and the value of savings better appreciated. Particular attention in the management of societies has been brought home to the members, the importance of self-help, and self-reliance, but the most important achievement of co-operation has been the instilling of a sense of community among the members of a co-operative body. If these signs become as common as they are now rare, and if, over and above the economic benefits achieved by it, co-operation succeeds in its true aim—the building up of the character of the people and the promotion of their welfare by the inculcation of the ideas of thrift and the principles of self-help, and, above all, by showing the wisdom of mutual help and brotherliness among the neighbours a re-education of rural life conducive to a better national life will not be far off.

Social Reform—Co-operation has, in some places, stimulated the desire for education and members of rural societies have been known even to advance to receive the elements of education to enable them to put their signatures on the society's papers, and to

Defective Education—It is the experience of those who have to deal with the organization and management of rural societies that the state of education among the agricultural population is not only a real hindrance to the development of co-operation but seriously endangers its very existence. There are villages where no schools exist and where there is hardly one individual who can read and write tolerably well. In most villages a few literate people can be found and it is these that form the nuclei of co-operative societies. Their ignorance in other matters is often so abysmal that it is hardly possible to explain to their minds even elementary notions of co-operation. Happily there are different kinds of villages where about 50 to 40 per cent of the population are able to read and write and where one finds a more intelligent man who can understand the elements of co-operation. In a large number of societies, as has been pointed out previously, the secretaries who are the real managers are not bona fide members. Thus, it may be urged, is contrary to a fundamental principle of co-operation that there should be internal management of the business, but it can scarcely be helped in a country where there are only a few among the total village population able to keep their accounts much less to undertake the management of a society. It is true that co-operation provides a higher type of education, but when the ground work itself is lacking it is impossible to build up the superstructure.

of money, debt and of undue concessions, but points out that in order to make the movement self-sustaining it will be necessary to provide some means of reckoning the profits of societies, either through the Presidency Banks or by means of a State Co-operative Bank and recommend that a careful examination be made of this question. The recommendation of the Committee are under consideration by Government.

# The Cocaine Traffic.

The form of cocaine chiefly used in India is Cocaine Hydrochloride. This salt forms light shining crystals, with a bitterish taste, and is soluble in half its weight of water. The alkaloid cocaine—of which this is a salt—is obtained from the dried leaves of the *Erythroxylon Coca*, the which grows in Bolivia, Peru, Java, Brazil and other parts of South America. The leaves are most active when freshly dried and are much used by the Natives as a stimulant. Tea made from them has a taste similar to green tea and is said to be very effective in keeping people awake. In India the Coca plant seems never to have been cultivated on a commercial scale. It has been grown experimentally in the districts of Ceylon, Bengal and Southern India and has been found to produce a good quality and quantity of cocaine. As the plant has not been seriously cultivated and as there is no possibility for the present of the drug being manufactured in India, no restrictions have yet been placed on its cultivation.

**Spread of the habit**—The cocaine traffic in India which seems to be reaching alarming proportions in spite of legislation and strict preventive measures is of comparatively recent growth, though it is impossible to estimate how widespread it was in 1908 when the Bombay High Court for the first time decided that cocaine was a drug included within the definition of an intoxicating drug in the Bombay Abkari Act. Since that date the illegal sale of cocaine in India has largely increased and the various provincial Excise Reports bear witness to the spread of the "Cocaine habit." The consumers of the drug, which is notoriously harmful, are to be found in all classes of society and in Burma even school children are reported to be its victims, but in India as in Paris the drug is mostly used by prostitutes or by men as an aphrodisiac. The habit has spread chiefly to those classes which are prohibited by religion or caste rules from partaking of liquor and the well known Indian intoxicating drugs.

**Imports from Europe**—Cocaine and its allied drugs are not manufactured in India, but are imported from Germany, France, England and Italy. Most of the drug which is smuggled into India, comes from Germany and bears the mark of the well-known house of B. Meck, Darmstadt. This firm issues cocaine in flat packets of various sizes ranging from 1 to 3 ounces which are easily packed away with other articles and greatly favour the methods of smuggling. Owing to its strength and purity cocaine eaters prefer this brand to any other in the market. Restrictions on export from Europe have been under consideration for some time but as yet no international scheme devised to that end has been agreed upon.

**Smuggling**—So far as the cases already detected show, the persons who smuggle the drug by sea from Europe and places outside India, into India, are chiefly sailors, stewards, firemen and sometimes engineers and officers of the Australian Lloyd and Florio Rubattino & Co. The ports through which cocaine enters India are Bombay, Karachi, Calcutta, Madras, Mangalore and Pondicherry. The main inland distributing centres are Delhi, Lucknow, Meerut, Lahore, Mooltan, Surat and Ahmedabad. Delhi especially is notorious for the cocaine trade. Great ingenuity is employed in smuggling cocaine through the Custom houses. It is packed in parcels of newspapers, books, toys and piece goods and in trunks which have secret compartments. The retail trade in the towns is very cunningly organized and controlled. In addition to the actual retailers, there is a whole army of watchmen and porters whose duty is to shadow the Police and Police Officers and give the alarm when a raid is contemplated. In spite of these precautions many big seizures have been made in Bombay, Calcutta, Karachi and elsewhere. In Bombay all Austrian and German ships are watched day and night by custom officers during the whole time the vessels are in port. This has resulted in smaller quantities being landed. The total quantity of cocaine seized in the Bombay Presidency during 1913-14 consequently fell to about 850 ounces. There was a further reduction in 1914-15 to only 635 ounces were seized, and for this the war is responsible.

**Price**—The cocaine seized is either given to Hospitals in India or destroyed. It is no longer possible to buy cocaine from any dealer or cases in the Police Courts show that the retail trade thrives, though to a diminished extent, in Bombay. High profits ensure the continuance of the trade. At present the English quotation is 12 shillings per ounce and the price as sold by licensed chemists in India is about Rs 17 per ounce. Owing to the war and the consequent stoppage of illicit importations from Austria and Germany it is not possible to buy the smuggled drug from the wholesale dealers for less than Rs 80 to 85 per ounce and when sold by the grain the price realized varies from Rs 300 to Rs 360 per ounce. These profits are further enhanced by adulteration with phenacetin and inferior guinea.

**The law in regard to Cocaine**—This varies in different provinces. A summary of the law in Bombay is as follows. No cocaine can be imported except by a licensed dealer and no portation by means of the post is entirely prohibited. The sale, possession, transport and export of cocaine are prohibited except under a license or permit from the Collector of the District. A duly qualified and licensed Medical practitioner is allowed to transport or remove 20 grains in the exercise of his profession from a duly qualified Medical practitioner. The maximum punishment for illegal sale, possession, transport, etc under Act V of 1878 as amended by Act XII of 1912 is as follows. Imprisonment for a term which may extend to one year or fine which may extend to Rs 2,000 or both and on any subsequent conviction imprisonment for a term which may extend to 2 years or fine which may extend to Rs 4,000 or both. In Bengal the maximum imprisonment awardable is 3 months. Action or possession of cocaine is 3 months' imprisonment under the Excise Act with or without a fine up to Rs 1,000.

without a fine up to Rs 1,000.

INDIAN TORRESCO

Many attempts have been made to introduce tobacco from the West Indies, but all have been disappointed. The tobacco has been bought up by his Majesty's agents, and the tobacco has been sent to the West Indies, where it has been sold at a high price. The tobacco has been sold at a high price, and the tobacco has been sold at a high price.

1911-12	1911-12	1911-12
10	10	10
107.33	107.33	107.33
61.407	61.407	61.407
1419.800	1419.800	1419.800
300.909	300.909	300.909
7.127.600	7.127.600	7.127.600
107.33	107.33	107.33
10	10	10
1911-12	1911-12	1911-12

# The Women's Medical Service for India.

This Service which was recently inaugurated under the auspices of the late Lady Har- ings, it included in the National Asso- ciation for supplying female medical aid to the Women of India, generally known as the Countess of the Dufferin's Funds and is adminis- tered by the Central Committee of that Fund. The Government of India has so far allotted the sum of £10,000 per annum towards its main- tenance. The present sanctioned cadre is twenty-five first class medical women, of which number five is for the purpose of forming a leave reserve. Recruitment of the service is made (a) in India by a medical sub committee of the Central Committee which includes the Director-General, Indian Medical Service, the Honorary Secretary to the Central Committee, and a first-class medical woman, (b) in England, by a sub-committee, consisting of a medical man and two medical women conversant with conditions in India, to be nominated by the Home Committee of the Countess of Dufferin's Fund. These sub-committees perform the duties of a medical board examining candidates for physical fitness, and for return to duty after invaliding.

The Central Committee determines what proportions of the members of the Service is to be recruited in England and in India respec- tively. In the original constitution of the Service, duly qualified medical women who are in the service of, or who have rendered approved service to, the Countess of Dufferin's Fund, are to have the first claim to appointment, and thereafter special consideration is to be paid to the claims of candidates who have been qualified in local institutions and of those who are natives of India.

**Qualifications**—The qualifications are that the candidate must be (a) a British Subject resident in the United Kingdom or in a British Colony or in British India, or a person resident in any territory of any Native Prince or Chief under the suzerainty of His Majesty exercised through the Governor-General of India or through any Governor or other officer subordinate to the Governor-General of India (b) must be between the ages of twenty-four and thirty at entry. (c) She must be a first-class Medical Woman, i.e., she must possess a medical qualification registrable in the United Kingdom under the Medical Act, or an Indian or Colonial qualification other than L.D.S. or Licentiate of a Medical College in India registrable in the United Kingdom under that Act but this condition does not apply at the original constitution of the Service to medical women in charge of hospitals who, in the opinion of the Central Committee, are of proved experience and ability. (d) The can- didate must produce a certificate of health and character. But the Central Committee re- serves the power to promote to the service ladies not possessing the above qualifications, but who have shown marked capacity. Mem- bers of the Service are required to engage for duty anywhere in India or Burma. Those recruited in England serve for six months, and those recruited in India for three months, in a General Hospital of the Province to which they

are deputed. After this period of probation has been satisfactorily passed their appoint- ments are confirmed. The services of members may be lent to Local or Municipal bodies, or to special institutions, which may be responsible for whole or part of the pay.

**Pay**—The rates of pay are as follows—During probation Rs 350 per month there- after Rs 400 up to the end of the 3rd year. Rs 450 from the 5th to the 7th year. Rs 500 from the 8th to the 10th year and Rs 550 after the 10th year. But no member can be confirmed in the 400 rupee grade unless she has passed an examination in such vernacular as the Provincial Committee shall prescribe, within one year of her appointment. In addition suitable quarters are provided free of rent or a house rent allowance to be deter- mined by the Provincial Committee may be granted in lieu of it.

Members of the Service are permitted to engage in private practice provided it does not interfere with their official duties, and the Provincial Committee has the power to deter- mine whether such duties are thus interfered with. Except in very special cases retirement is compulsory at the age of forty-eight. A member whose appointment is not confirmed, or who is dismissed, is granted an allowance sufficient to pay her passage to England.

**Leave Rules**—(a) Casual Leave, which is occasional leave on full pay for a few days, and is not supposed to interrupt duty. (b) Privilege Leave, which is leave on full pay and is meant to provide a month's holiday in the year. It cannot be granted during the year, it can be accumulated up to a limit of three months. (c) Furlough, at the rate of two months for each year of duty, the latter in- cluding privilege leave and casual leave. First furlough is not granted till after four years of duty, and more than eight months furlough is not granted at one time. Study leave may also be granted not exceeding three months at a time and up to nine months during the whole service. (d) Sick leave, up to a maximum of two years. (e) Extraordinary leave at any time at the discretion of the Central Committee. When on furlough or sick leave the allowances are half the average monthly pay of the six months presence on duty immediately preced- ing the taking of the leave. There are no allowances during extraordinary leave. A Lady appointed in England receives a sum of £70 to cover her passage and incidental ex- penses. There are also allowances to cover the cost of journeys by rail and road.

There is also to be a Provident Fund, each member contributing monthly thereto five per cent of her salary, the association contributing an equal amount, and each subscriber's account being credited with interest at the rate of 4 per cent per annum, or at such rate as the Central Committee can invest without risk to the funds of the Asso- ciation.

The Member loses her contributions if she resigns (except on account of ill-health) before completing five years service, or in the event



ing school in India for the instruction of the Bombay Branch of the Association in connection with the Cama Hospital in Bombay. This is a civil institution under Government management, and is solely for women and children of all castes and denominations. In connection therewith is the All India Obstetrical Hospital and the latter Southman dispensary for women and children. The present physical charge is Miss A. M. Benson, M. A., London. By the end of 1914 there were thirteen Provincial Branches working under the central committee, and attached in some manner, or affiliated to the provincial branches, there were about one hundred and forty local and District Associations or Committees engaged in furthering the work of the Association.

## NURSING.

Whilst India cannot show the complete chain of efficiently nursed hospitals which exists in England, there has been a great development of skilled nursing of recent years. This activity is principally centred in the Bengal, Madras, and Bombay Presidencies, where the chief hospitals in the Presidency are well nursed, and where large private staffs are maintained, available to the general public on payment of a prescribed scale of fees. These hospitals also act as training institutions, and turn out a yearly supply of fully trained nurses, both to meet their own demands and those of outside institutions and private agencies. In this way the supply of trained nurses, English, Anglo-Indian and Indian, is being steadily increased. In Bombay the organisation has gone a step farther, through the establishment of the Bombay Presidency Nursing Association, c/o St. George's Hospital. This is composed of representatives of the various Nursing Associations in charge of individual hospitals, and works under the Government. The principle on which the relations of this Association with the Local Associations is governed is that there shall be central examination and autonomy in administration.

**Nursing Bodies**—The Honorary Secretary of the Calcutta Nursing Association is Mr. R. B. Reynolds, the Presidency General Hospital. The address of the Mayo Hospital Nursing Association is in Strand Road. In Madras there is the General Hospital, with a staff of 62 nurses, the Government Maternity Hospital, the Caste and Gosha Hospital at Kilpank, the Koyampeta Hospital and the Ophthalmic Hospital.

**Bombay Presidency**—The Bombay Presidency was amongst the first in India to realise the value of nursing in connection with hospital work. The first steps were taken on the initiative of Mr. L. R. W. Forrest at St. George's Hospital, Bombay, where a regular nursing cadre for the hospital was established together with a small staff of nurses for private cases. This was followed by a similar movement at the J. J. and Allied Hospitals and afterwards spread to other hospitals in the Presidency.

Ultimately the Government laid down a definite principle with regard to the financial aid which they would give to such institutions, and which they would contribute a sum equal to that raised from private sources. Afterwards, as the work grew, it was decided by Government that each nursing association attracted to a hospital should have a definite contribution, and consequently these bodies have all been registered as Associations under Act 21 of 1900. In degree substantial endowments have been built up although the Associations are still largely dependent upon annual subscriptions towards the maintenance of their work. The chief of these Associations are—

St. George's Hospital Nursing Association, Secretary, D. W. Wilson, St. George's Hospital, Bombay.

J. J. Hospital Nursing Association, Secretary, A. R. Gray, Jammisethi Bhabhai Hospital, Bombay.

Gokuldas Tejpal Hospital Nursing Association, Secretary, Mahimullah Currimbhoy.

Cama Hospital Nursing Association, Address—Cama Hospital, Bombay.

Sassoon Hospital Nursing Association, Address—Sassoon Hospital, Pooná.

Almshospital and L. J. Memorial Association, Address—Civil Surgeon, Ahmedabad.

After further experience it was felt that it is undesirable to have a considerable number of detached and independent nursing associations, and a common standard of entrance examination, or certification. It was therefore decided to establish the Bombay Presidency Nursing Association which came into existence in the year 1910. This is an Association formed partly of representatives of all affiliated associations and partly of direct representatives of the Surgeon-General with the Government of Bombay always being the chairman. It is financed partly from the production of endowments and partly from contributions from the Government of India. It subsequently further funds are needed they are to be provided by contributions from the affiliated Associations.







in respect to the Indian population of the British Empire, the British Government has been the first to take steps to improve the condition of the Indian population. The Indian population of the British Empire is now a large population, and it is not only a large population, but it is also a population of a high standard of living. The Indian population of the British Empire is now a large population, and it is not only a large population, but it is also a population of a high standard of living. The Indian population of the British Empire is now a large population, and it is not only a large population, but it is also a population of a high standard of living.

An exaggerated danger—Many every day are told that the Indian population of the British Empire is now a large population, and it is not only a large population, but it is also a population of a high standard of living. The Indian population of the British Empire is now a large population, and it is not only a large population, but it is also a population of a high standard of living. The Indian population of the British Empire is now a large population, and it is not only a large population, but it is also a population of a high standard of living.

countersigned by the Magistrate of the District in their own part of the country. They are conveyed thence to the main depot at the port of embarkation. These depots are under the control of the Protector of Emigrants, whose duty it is to ascertain whether the coolies are willing to emigrate and understand the nature of the contract into which they have entered. He is required to assist and advise them to the best of his powers. He must also inspect the ships chartered for the conveyance of the coolies to their destination, and to see that the regulations governing the accommodation on board are duly complied with. Each emigrant undergoes a medical examination before embarking. On arrival at the port of destination the emigrants are met by an official of the colony, who is styled the Immigration-Agent General. His duties are similar to those of the Protector of Emigrants in India with the important addition of supervising the conditions of labour on the plantations. The Government of India may prohibit emigration to any colony in which the rate of mortality amongst the indentured coolies is unduly high, or where proper measures for their protection have been neglected, or the agreements made with the coolies have not been fulfilled. Indentured emigration to Natal has been stopped by the Government of India in consequence of complaints received from that country as to the treatment of the coolies.

**Calcutta**—There were five emigration agencies at work at Calcutta but at the end of 1913 the emigration agencies at Calcutta for Trinidad, Jamaica and Mauritius were amalgamated with that for British Guiana. At the same time a central agency was established at Barmes. The total number of labourers requisitioned fell from 10,447 in 1912 to 5,167 in 1913. The total number of emigrants registered during the year was 9,171, giving an average of 10 emigrants per recruit, as against 11 in the preceding year. This number was contributed by the different provinces in the following proportions—United Provinces, 73.66 per cent, Punjab 10.5 per cent, Bengal, 7.37 per cent, Bihar and Orissa, 7.16 per cent, Ajmere and the Central Provinces, 1.58 per cent.

The number of emigrants who returned from the several colonies was 3,651, and their ascertained aggregate savings amounted to about £42,900. The average savings per head

About the end of 1912, the Government of India appointed a Commission of two, Mr J McNeill and Mr Chiman Lal, to report upon the conditions of life of the Indian immigrants in the colonies. The Commissioners were also desired to submit recommendations as to any

## INDENTURED LABOUR AND INDIAN OPINION

Statistics showing approximately the number of British Indian subjects in the various colonies—

Trinidad	117,100
British Guiana	129,380
Jamaica	20,000
Barbados	44,220
Surinam	26,919
Reunion	3,012
Mauritius	257,697
Federated Malay States	210,000
Figures not available	6,606
Natal	133,031
Transvaal	10,048
Orange Free State	106
Southern Rhodesia	Figures not available
Australia	Do
New Zealand	Do
Canada	2,600 or 4,600 (the number is uncertain)

Statistics showing approximately the number of British Indian subjects in the various colonies—

**Bombay**—The number of immigrants shipped from the port of Bombay under the Indian Immigration Act rose from 230 to 258. Of these 171 were bound for British East Africa and 77 were workers for the Anglo-Persian Oil Company at Mahommurah. From Karachi 334 emigrants (mostly Punjabis) left for Uganda and 103 for the Persian Gulf. A number of other emigrants left the coast districts for South Africa. The Surat District alone exported 1,079 such departures, the voyage being for the most part by the wives and children of established emigrants.

**Madras**—The total number of emigrants under the Immigration Act regulations was 2,260 as against 2,546 in 1912. Emigration in 1912 was so far confined to Fiji and British 216 from Mauritius and 125 from Fiji. As regards non-regulation emigration the number of passengers to the Straits Settlements rose from 107,812 to 117,784. The High Courts offered on the rubber plantations being doubtless the chief attraction. Passengers to Ceylon rose from 18,400 to 190,059. Emigration to Burma increased.

There was a slight increase in the average amount remitted by resident immigrants in respect of the colonies of British Guiana, Trinidad, Mauritius and Natal and a decrease in respect of Surinam and Jamaica. The average was again highest in the case of Natal (178), but this probably includes remittances from traders, etc., as well as labourers. The Immigration Act regulations of emigrants and the Immigration Agent General have been revised, and the regulations of emigrants and the Immigration Agent General have been revised, and the regulations of emigrants and the Immigration Agent General have been revised.

**Indian Feeling**—For some years past, there has been a growing feeling amongst Indian leaders that the indentured system of labour was inconsistent with national self respect, and should be stopped. This feeling originated in the belief that the treatment accorded to Indians in the self-governing colonies, especially in South Africa, was due to the Colonials coming to think poorly of Indians as a race because of the class represented by indentured labourers. In 1910, the Government of India accepted a resolution moved by the late Mr. Gokhale putting an end to the indentured system so far as against the system, and it is not forced by the rapid industrial development of the country making largely increasing demands on the labour market, depleted to some extent by the ravages of plague during the last twenty years. The startling figures of suicide and the admissions as regards the prevalence of gross immorality among estate populations have roused public feeling in the country, and this has been accentuated by well authenticated ability having been decoyed by dishonest recruiting agents to the employment on deplorable farms, late of St. Stephens' College Delhi, and now connected with the school conducted on his own original lines by Sir Habib-un-Nizah Tagore—the former laureate of the Viceroy, as the Viceroy applied him—deputed by the Indian Citizenship Association of Bombay to visit Fiji and to investigate the conditions which make for the high rate of suicide recorded in that colony. He is accompanied by Mr. W. Pearson, who is also associated with the Poplar School Messrs. Andrews and Pearson, it may be mentioned, visited South Africa when the Festive Re-Union ceremony held by Mr. Gandhi was in being, and rendered valuable service in bringing about the settlement that was eventually arrived at. They have visited Australia on their way to Fiji, and have, it is understood, enlisted the sympathy of leading Australian statesmen on behalf of the mission.

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# Indians in Great Britain.

Close on sixty years have gone by since the Parsi community, in the persons of Mr. Dadabhai Nauroji and other members of the firm of Cama and Co., led the way in the residence of Indians in England for business purposes. This lead has since maintained, though there are both Hindu and Mohammedan business men firmly established there. Not are the professions unrepresented, for there are in London practicing barristers and solicitors of Indian birth. Two Indians are on the Secretary of State's Council, and at least one successful in the Civil Service examination elected to work in England instead of returning to his native land. The early years of the present century have seen the gathering of a new Indian element in permanent residence—that of retired officials (particularly of the I. M. S.) and business men, or people of independent means who from preference, or in order to have their children educated in England, leave the land of their birth and seldom if ever visit it again. Further, the (temporarily greatly diminished by the war) stream of Indian summer visitors includes wealthy people who return as regularly as the swallows in spring, and some of them spend as much time in England or on the Continent as in their native land. While the men adopt European dress so fully that a turban is a rare sight even at Indian gatherings, the ladies wisely retain their graceful Eastern habiliments, and it is astonishing to note on occasions how large a number of Indian women so attired can be collected together at the Criterion or at 21 Cromwell Road. In the last fifteen months thousands of our valiant Indian soldiers, wounded or invalided from Flanders, have gone to England for the first time in their lives, to be nursed back to health in the well-equipped and admirably administered Indian hospitals in Hampshire, and at Brighton.

## The Students

But under normal conditions it is the student community which constitutes the greatly preponderating element and creates an Indian problem. Its numbers have multiplied ten or twelfold in the last quarter of a century, the increase being especially rapid since 1904. In 1905 there was indeed an artificial inflation of the numbers, when many youths (some of them ill prepared) were hurried off to the Inns of Court in order to be entered before more stringent rules for admission from the overseas dominions came into force. While this sudden expansion has been worked off to a large extent, there has been development in other directions, and particularly that of the technical and engineering schools and classes. Allowing for the very considerable temporary check caused by the European War the aggregate number may be estimated at between 1,300 and 1,400. This total does not include more than a few of the growing number of youths of good family, some of them heirs of Native States, admitted into our public schools, including Eton and Harrow. Nor the younger children of resident Indians. It does not comprehend Burmese students of whom there are about 80. Nor does it take full account of female students.

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It is well known that until a few years ago the young Indians, apart from inadequately supported unofficial effort and the chance of coming under the influence of English friends of their families, were practically left to their own devices. But in April 1900 Lord Morley, as a result of the investigations of an India Office Committee, created for their benefit a Bureau of Information and appointed Mr. J. W. Arnold to the charge of it under the title of Educational Adviser. The Bureau was located in due time at 21 Cromwell Road, together with the National Indian Association and the Northbrook Society, which were thus given spacious quarters for their social work among the young men, without incurring what would otherwise have been the prohibitive cost of heavy rent. Lord Morley also established an Advisory Committee, mainly composed of influential Indian residents, and in India corresponding provincial and district committees were formed to help and advise intending students. The work of the Bureau rapidly expanded, and in consequence Lord Crewe in 1912 re-organised the arrangements under the general charge of a Secretary for Indian Students, Mr. C. E. Mallet. While Mr. Arnold continued to look after the London students and to act as guardian when so desired by the parents, local advisers were appointed at the provincial universities.

Two strange delusions (in some cases they may be called deliberate misrepresentations) have been propagated in reference to these arrangements. One is that the India Office set up the Bureau in order to track down the wave of seditious sentiment which culminated in the assassination of Sir Curzon Wyllie five years ago. As a matter of fact the Bureau was established three months before the commission of that crime, and was proposed at least a year previously. The object as *The Times* observed in September 1908 was not "to put these young men into political leading stings, nor officially to restrict their liberty. It lies in doing all that is possible to facilitate their educational progress and their general welfare, and in bringing them under wholesome and helpful influence." Mr. Arnold accepted his appointment on the distinct



## Appointments to the Indian Services.

Full details of the regulations governing appointments to the Indian Services are published in the India Office List. The more essential particulars, except as regards the Civil Service and Police,—of which fuller details are given elsewhere in this Book—are given below.

### Indian Agricultural Service.

The salary attached to posts in the Indian Agricultural Service will ordinarily be—

Rs	For the first year
100 per mensem.	second year
130	third year
160	fourth and subsequent years
500 rising by annual increments of Rs 50 a month to Rs 1,000 a month	

Candidates who are required to undergo a further course of training in India as explained above will be appointed on this scale of salary, commencing on a pay of Rs 400.

Where, for special reasons, a candidate is recruited for direct appointment to one of the regular posts under paragraph 1, his initial pay will be determined with reference to the special qualification on the length of European experience required for the appointment for which he is specially selected, but has subsequent increments of salary will be regulated by the foregoing scale. In addition to this scale of pay, officers filling appointments directly under the Government of India, as distinguished from appointments under Local Governments (but not including officers holding supernumerary posts, the post of Inspector-General, or the post of Director of the Pusa Institute) will be eligible for local allowances conditional on approved good work, and the Government reserves to itself the fullest discretion as to granting, withholding, or withdrawing them.

### Indian Civil Veterinary Department.

The officers of the Indian Civil Veterinary Department perform or supervise all official veterinary work in India, other than that of the Army, and are debarré from private professional practice in India. Their duties may be divided into three classes, under the following heads—

(a) Educational work in veterinary colleges, (b) Horse and mule breeding, (c) Cattle disease and cattle breeding. Appointments to this Department are made, as vacancies occur, by the Secretary of State for India, as vacancies occur. Candidates must not (except on special grounds) be over 26 years of age, and must be over 20 years of age, and must possess a diploma from the Royal College of Veterinary Surgeons. Evidence of a knowledge of bacteriology, and of capacity for carrying out original research, will be specially taken into account in estimating the claims of candidates. Good health, a sound constitution, and active habits are essential, and candidates must be certified by the Medical Board of the India Office to be physically fit for service in India. Day will be as follows—On arrival in India Rs 100, which rate will continue from the beginning of the 15th to the end of the 20th year of service, after the beginning of the 21st year Rs 1,200 a month.

### Ecclesiastical Establishments (Church of England).

The salaries of Chaplains are—  
Senior Chaplains, Rs 10,200 per annum for five years, and then Rs 12,000 per annum  
Junior Chaplains, Rs 6,860 per annum for five years, and thereafter Rs 8,160 per annum until promoted to be Senior Chaplains.  
Chaplains on Probation, Rs 5,760 per annum.  
A Junior Chaplain becomes a Senior Chaplain after ten years' service, excluding the period of probation.

Appointments of Chaplains on Probation are made from time to time by the Secretary of State for India, as vacancies occur. Candidates for India, as vacancies occur. Candidates must not (except on special grounds) be over 26 years of age, and must be over 20 years of age, and must possess a diploma from the Royal College of Veterinary Surgeons. Evidence of a knowledge of bacteriology, and of capacity for carrying out original research, will be specially taken into account in estimating the claims of candidates. Good health, a sound constitution, and active habits are essential, and candidates must be certified by the Medical Board of the India Office to be physically fit for service in India. Day will be as follows—On arrival in India Rs 100, which rate will continue from the beginning of the 15th to the end of the 20th year of service, after the beginning of the 21st year Rs 1,200 a month.

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The appointments in the Indian Agricultural Service include those of Deputy Director of Agriculture, Agricultural Chemist, Economic Botanist, Mycologist, Entomologist, Professors of Agriculture, Chemistry and Botany at Agricultural Colleges, and the like. Some of these are included in the Imperial Department of Agriculture under the direct control of the Government of India, but the majority are included in the Departments of Agriculture of the several provinces of India. In some cases candidates will be appointed direct to these posts, but in most cases they will be appointed as supernumeraries, will undergo a further course of training in India in Indian agriculture, and will be appointed to posts, for which in the opinion of the Government they are considered suitable on the regular establishment as vacancies occur. Appointments are made by the Secretary of State for India as occasion may require. Candidates must, as a rule, be not less than 23, nor more than 30 years of age. In selecting Candidates for appointment, weight will be given to the possession of (a) a University degree in honours in science or the diploma of a recognised school of agriculture or other like distinction, (b) qualifications in a special science according to the nature of the vacancy to be filled, (c) practical experience and ability to ride, and selected Candidates have to undergo an examination by the Medical Board of the India Office as to their physical fitness for service in India.

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1. The first step is to identify the problem. This involves understanding the current situation and what needs to be improved.

2. The second step is to set goals. These should be specific, measurable, achievable, relevant, and time-bound (SMART).

3. The third step is to develop a plan. This involves determining the steps needed to achieve the goals and assigning responsibilities.

4. The fourth step is to implement the plan. This involves putting the plan into action and monitoring progress.

5. The fifth step is to evaluate the results. This involves comparing the actual results with the goals and identifying areas for improvement.

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heads of Training Colleges, and occasionally Headmistresses of Schools. The salary attached to these appointments is ordinarily Rs. 400 a month rising by annual increments of Rs. 20 a month to Rs. 500 a month. The Secretary of State is sometimes requested by the Government of India to supply persons to fill temporary vacancies in the Indian Education Department.

**Indian Forest Service.**

The Secretary of State for India in Council makes appointments of Probationers for the Indian Forest Service, according to the numbers annually required.

Candidates must be not less than 19 but under the age of 22 years

Candidates must have obtained a degree with Honours in some branch of Natural Science in a University of England, Wales or Ireland, or have passed the Ethical Bachelor of Science Examination in Pure Science in one of the Universities of Scotland. A degree in applied Science will not be considered as fulfilling these conditions. Candidates will be required to produce evidence that they have a fair knowledge of either German or French.

The ordinary period of probation will be two years. During that time probationers will be required to pass through the Forestry course at one of the following Universities—Oxford, Cambridge or Edinburgh (subject to the arrangement of a suitable course)—becoming members of that University, if not so already, to obtain the Degree or Diploma in Forestry, which it grants, and to satisfy such other tests of proficiency as may be deemed necessary.

During the vacations, the Probationers will, under the direction and supervision of the Director of Indian Forest Studies appointed by the Secretary of State for India in Council, receive practical instruction in such British and Continental forests as may be selected for the purpose.

Probationers who obtain a Degree or Diploma in Forestry, and also satisfy such other tests of proficiency as may be prescribed, will be appointed

The Geological Survey Department is at present constituted as follows —

Indian Geological Survey.

Scale of Pension		Minimum Limit of Pension
Years of Completed Service	Sixtieths of Average Emoluments	
20 to 24		Rs 4,000 a year
25 and above	30	Rs 5,000 a year

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An Assistant Conservator of the date of his reporting his arri-  
sings by annual increments of \$1  
to \$700 a month, thereafter by  
increments of \$50 a month to  
month in the 20th year of service  
After a service of not less than  
retiring pension is granted not

187 Deputy and Assistant Conservators

22	Conservators, in three grades, (including President, Forest Research Institute and College)
2,	and Central Provinces)

2 Chief Conservators (Burma  
of Forests

1 Inspector-General of Forests 2,  
1 Assistant Inspector-General

I — 81

In the Indian Forest Service  
The sanctioned scale of the service

ed Assistant Conservators in the I Department, provided they are of station and free from physical disability, would render them unsuitable for

St Service.

INCREASEMENTS OF RS 50 A MONTH.

approved services, or limited access to temporary or a permanent

with a prospect, in the case of

Colleges. Such appointments are in

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Indian Public Works Department

THE UNIVERSITY OF CHICAGO

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State Railways.

The establishment of certain sources is recognized by the Government of India and State Railways consists of a sum of officers military and civil, engaged in the various establishments by the State in India. The following sources —

- (i) Officers of Royal Engineers;
- (ii) Persons appointed by the Secretary of State by selection from the United Kingdom,
- (iii) Persons appointed in India,
- (iv) Occasional admission of other qualified persons

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Figure 1. The effect of the concentration of the inhibitor on the rate of polymerization of  $\alpha$ -methylstyrene in the presence of  $\text{SnCl}_4$  at  $50^\circ\text{C}$ .

1. What is the purpose of the document?  
 2. What are the main findings of the study?  
 3. What are the implications of the findings?  
 4. What are the limitations of the study?  
 5. What are the conclusions of the study?

King's India Cadetship

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is strongly in the past

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### Royal Indian Marine

• All first appointments of executive officers in the Royal Indian Marine are made by the Secretary of State for India

The limits of age for appointment to the junior executive rank, that of Sub-Lieutenant, are 17 and 22 years, and no candidate will be appointed who does not possess the full ordinary Board of Trade certificate of a Second Mate, certificates for foreign going steamships will not be accepted

#### PAY AND ALLOWANCES

The present establishment of officers of the Royal Indian Marine and their allowances are as follows—

32 Commanders on pay ranging from Rs 350 to Rs 500, in per messmen addition to staff or command pay

Lieutenants on completing eight years' seniority	On Rs 300	Lieutenants on completing six years' seniority	On Rs 250	Lieutenants on completing three years' seniority	On Rs 200	Sub-Lieutenants under three years' seniority	On Rs 150	Sub-Lieutenants	On Rs 125	Total	104

In addition, 3 Commanders and 8 Lieutenants are at present employed in the Marine Survey of India

A certain number of Shore, Port, and Marine Survey appointments are usually reserved for officers of the Royal Indian Marine. The numbers so reserved and the allowances attached (in addition to pay of grade), are as follows—

4 Shore appointments	400—1000
16 Port appointments	320—870
11 Marine Survey appointments per annum	4—20

The sanctioned establishment of the Engineers branch of the Marine numbers 82, of whom, at present, 10 are Chief Engineers, and the remainder Engineers and Assistant Engineers

months of such wounds having been received, or from illness brought on by fatigue, privation or exposure, incident to active operations in the field before an enemy, within six months after their having been admitted to be ill

(b) The sons of officers of the Indian Army, who have attained the breast substantive rank of Major or Lieutenant Colonel, and have performed long or distinguished service in Honorary King's Cradiship carries with it no pecuniary advantage

### Queen Alexandra's Military Nursing Service for India.

The Nursing establishment is for duty with British officers and soldiers, and at present consists of—

- 1 Lady Superintendent
- 21 Nursing Sisters

The numbers in these grades are subject to allocation

Nursing Sisters at the time of appointment must be over 27 and under 32 years of age. Candidates for the service must have had at least three years' preliminary training and served combined in the wards of a British general hospital or hospital of not less than 100 beds in which adult male patients receive medical and surgical treatment, and in which a staff of Nursing Sisters is maintained

The duration of a term of service, for all grades of lady nurses, is five years. A lady nurse who has been pronounced by a medical board to be physically fit for further service in India, may be permitted to re-engage for a second and third term at the option of the Government, and again for a fourth term, until the age of compulsory retirement, if in all respects efficient and if specially recommended by the Commanding Officer in India. But a lady nurse will not under any circumstances be permitted to remain in the service in the grade of Lady Superintendent beyond the age of 55 years, or in either of the other grades beyond the age of 50 years

#### Rates of Pay

(In addition to free quarters, fuel, light, and punkah-pullers)

Rs per messmen	300
Lady Superintendent	400
Senior Nursing Sister over five years in grade	225
Senior Nursing Sister under five years in grade	200
Nursing Sister over five years in grade	200
Nursing Sister under five years in grade	175

# Sterling Equivalents

N.B.—In calculating the sterling equivalents of rupee salaries drawn by Europeans appointed in England to permanent service in India, it is necessary to bear in mind that in some cases Exchange Compensation Allowance is drawn in addition to salary. This allowance is at present at the rate of 64 per cent on the salary, subject to a maximum of Rs. 138-14-3 a month, but the rate is subject to alteration in the event of any material variation in the average rate of exchange between England and India.

The following table shows the approximate equivalent in sterling of the rupee salaries stated, (a) when Exchange Compensation Allowance is not granted, (b) when it is granted at the rate just mentioned —

Rupees per Menssem	Rupees per Annum	(a) Equivalent without E C A		(b) Equivalent with E C A		Rupees per Menssem	Rupees per Annum	(a) Equivalent without E C A		(b) Equivalent with E C A		Rupees per Menssem	Rupees per Annum	(a) Equivalent without E C A		(b) Equivalent with E C A		Rupees per Menssem	Rupees per Annum	(a) Equivalent without E C A		(b) Equivalent with E C A	
		£	₹	£	₹			£	₹	£	₹			£	₹	£	₹			£	₹	£	₹
100	1,200	80	85	650	7,800	520	552	1,600	19,200	1,280	1,360	2,900	34,800	2,320	2,431								
125	1,500	100	106	700	8,400	500	595	1,700	20,400	1,360	1,445	3,000	36,000	2,400	2,511								
150	1,800	120	127	750	9,000	600	637	1,800	21,600	1,440	1,530	3,100	37,200	2,480	2,591								
175	2,100	140	149	800	9,600	640	680	1,900	22,800	1,520	1,615	3,200	38,400	2,560	2,671								
200	2,400	160	170	850	10,200	680	722	2,000	24,000	1,600	1,700	3,300	39,600	2,640	2,751								
250	3,000	200	212	900	10,800	720	765	2,100	25,200	1,680	1,785	3,400	40,800	2,720	2,831								
300	3,600	240	255	950	11,400	760	807	2,200	26,400	1,760	1,870	3,500	42,000	2,800	2,911								
350	4,200	280	297	1,000	12,000	800	850	2,300	27,600	1,840	1,951	3,600	43,200	2,880	2,991								
400	4,800	320	340	1,100	13,200	880	935	2,400	28,800	1,920	2,031	3,700	44,400	2,960	3,071								
450	5,400	360	382	1,200	14,400	960	1,020	2,500	30,000	2,000	2,111	3,800	45,600	3,040	3,151								
500	6,000	400	425	1,300	15,600	1,040	1,105	2,600	31,200	2,080	2,191	3,900	46,800	3,120	3,231								
550	6,600	440	467	1,400	16,800	1,120	1,180	2,700	32,400	2,160	2,271	4,000	48,000	3,200	3,311								
600	7,200	480	510	1,500	18,000	1,200	1,275	2,800	33,600	2,240	2,351	5,000	60,000	4,000	4,111								

# The Indian Civil Service.

In the early years of the eighteenth century the East India Company was still little more than a body of traders. The genesis of the Indian Civil Service is to be sought in the modifications which the Company underwent as it found itself year by year more involved in the government of the country with which it was trading. It was gradually realised that neither the pay nor the training of the Writers, Factors and Merchants of the Company was adequate to the administrative work which they were called on to perform. As a result this work was often inefficiently done, and corruption was rife. To Lord Cornwallis is due the credit of having reorganised the administrative branch of the Company's service, in accordance with three main principles from which there has been hitherto no deviation. These were that every civil servant should covenerate neither to engage in trade nor to receive presents, that the Company on their side should provide salaries sufficiently handsome to remove the temptation to supplement them by illegitimate means, and that, in order that the best men might be attracted the principal administrative posts under the Council should be reserved for members of the Company. Civil Service as it was called. The first of these principles is embodied not only in the covenant which every member of the service still has to sign on appointment, but also in the "Government Servants' Conduct Rules," which are applicable to every civil department, however recruited. As regards the second, the scale of salaries originally prescribed was so handsome that it has not yet been considered expedient to undertake any general revision of it. The last of reserved posts remains, too much the same as in 1783, though certain modifications have been introduced to meet Indian aspirations. At first nominations to the service were made by the Directors, but this right was withdrawn by Act of Parliament in 1853, and since 1855 appointments have been open to public competition, all natural-born subjects of the Crown being eligible. The age-limits and other conditions of examination have varied considerably from time to time, but at present candidates are examined between the ages of 22 and 24. At first young officers were sent straight to their appointments on recruitment, but in 1800 Lord Wellesley established a college at Fort William for their preliminary training. This was not a success and in 1805 a college at Haileybury was substituted, and for 53 years nominees underwent a two years' course at a British University before proceeding to India. At present a year's course at a British University is a further examination. Failure to pass thus means final loss of appointment, and seniority in the service is determined by combining the result of the open competition and this final compulsory examination.

The Statute of 1793 (33 Geo cap 52) modelled for members of the Indian Civil Service. In 1861, sets forth the list of offices reserved for members of a District is known as the Collector in the provinces of Bengal, Madras, Bombay, Agri and Deputy Commissioner, and his assistants are

The young civilian, on joining his appointment in India, is attached to a district as assistant to the Collector. He is given limited magistratorial powers and after passing examinations in the vernacular and in departmental matters he attempts to fill magistratorial posts in the judicial branch and become an Assistant Judge. In course of time promotion occurs and he becomes either Collector and District Magistrate, or District and Sessions Judge. This promotion does not generally occur before he has served for at least ten years. The district Judge is the principal civil tribunal of the district and wields extensive appellate powers. In his capacity as Sessions Judge he tries the more important criminal cases of the district.

The Collector is not merely chief magistrate and revenue officer of his district. He also forms a court of appeal from subordinate magistrates, supervises municipalities and local boards, is chief civil officer and district registrar, and in general represents Government in the eyes of the people. The Collector and his assistants are expected to travel over their charges round the district in different provinces, but in Bombay the Collector is not required to do so. The Collector is not merely chief magistrate and revenue officer of his district. He also forms a court of appeal from subordinate magistrates, supervises municipalities and local boards, is chief civil officer and district registrar, and in general represents Government in the eyes of the people. The Collector and his assistants are expected to travel over their charges round the district in different provinces, but in Bombay the Collector is not required to do so. The Collector is not merely chief magistrate and revenue officer of his district. He also forms a court of appeal from subordinate magistrates, supervises municipalities and local boards, is chief civil officer and district registrar, and in general represents Government in the eyes of the people. The Collector and his assistants are expected to travel over their charges round the district in different provinces, but in Bombay the Collector is not required to do so.

By the time the highest grade is reached the Collector or Judge are reached in the 45th or 50th year on tour.

The Chief Revenue Officer of a District is known as the Collector in the provinces of Bengal, Madras, Bombay, Agri and Deputy Commissioner, and his assistants are

(3) Such limitations as still exist in the employment of non-Europeans and the working of the existing system of division of services into Imperial and Provincial.

and generally to consider the requirements of the Public Service, and to recommend such changes as may seem expedient.

**Work of the Commission**—The Royal Commission visited India in the cold weather of 1912-13, and toured extensively in India, including Burma, considering their attention mostly to hearing the evidence of and relating to the Indian Civil Service. They subsequently sat in London and in October, 1913, again left for India to enquire into 28 Services other than the Indian Civil and the Provincial Services. They assembled first at Delhi on November 1st, and examined Imperial officers and witnesses from the United Provinces, the Punjab and the North-West Frontier Province. They then assembled at Calcutta in the middle of December, to hear witnesses from Bengal, Bihar and Orissa, and Burma. Early in February the Royal Commission went to Madras, and completed the four at Bombay, where witnesses from Western India and the Central Provinces were heard. The Commission returned to England in the spring of 1914, and has drawn up a report of which publication has been delayed on account of the war.

### Temporary Provisions.

In October, 1915, a Bill was introduced into the House of Lords, entitled, "An Act to enable Persons during the continuance of the War, and for a period of two years thereafter, to be appointed or admitted to the Indian Civil Service without examination." The following is the text of its provisions—"(1) The Secretary of State in Council may with the advice and assistance of the Civil Service Commissioners make rules providing for the admission and appointment to the Indian Civil Service by the Secretary of State in Council, during the continuance of the present war, and for a period not exceeding two years thereafter, of British subjects possessing such qualifications with respect to age and otherwise as may be prescribed by the rules, notwithstanding that they have not been certified as being entitled for appointment as the result of examination in accordance with the regulations and rules made under section thirty-two of the Government of India Act, 1858 and section ninety-seven of the Government of India Act, 1915. Provided that—(a) not less than one-fourth of the persons admitted to the Indian Civil Service during such period as aforesaid shall be persons who have been so certified as aforesaid; and (b) a person shall not be appointed to the Indian Civil Service under the rules made under this section unless the Civil Service Commissioners certify that by such means as may be prescribed by the rules they have established themselves that in their opinion he possesses the necessary educational qualifications." The provisions as to the laying before Parliament of regulations and rules made under

has, as a rule, nearly completed the 25 years are still posts to which he can look forward Should he elect to continue in service there for promotion. On the one hand, he may become a Commissioner or even a Member of Council, and on the other, there are judicial Commissionerships and seats on High Court Benches. Such is the normal career of a Civilian, but this, by no means, completes the account of his prospects, for nearly one-fourth of the service is, as a rule, employed in posts—some reserved and some not—out of the regular line. A number of Civilians are employed in the Imperial and Provincial Secretariats, some are in political employ in the Native States, others hold responsible positions in the Customs, Police, Post Office and other departments, or supervise big municipalities and public trusts.

The Civilian may retire after 25 years' service and in the ordinary way must retire on reaching the age of 55. He contributes throughout his service to a pension which is fixed, regardless of whether he has risen to be a Lieutenant-Governor, or has remained at the foot of the ladder. Every Civilian, moreover, married or single, subscribes to an annuity fund which provides for the widows and orphans of deceased members of the service.

### Public Services Commission

In July, 1912, it was announced that the King had been pleased to approve the appointment of a Royal Commission to examine and report upon the Public Services in India. The Royal Commission was constituted as follows—  
Chairman—The Right Hon. Lord Islington, K.C.  
The Earl of Ronaldshay, M.P.  
Sir Murray Hamrick, K.C.S.I., C.I.E., Indian Civil Service  
Sir Theodore Morrison, K.C.I.E., Member of the Council of India  
Sir Valentine Chitrol  
Frank George Sly, Esq., C.S.I., Indian Civil Service  
Mahadev Bhaskar Chaudh, Esq., C.S.I., Member of the Governor of Bombay's Executive Council  
Gopal Krishna Gokhale Esq., C.I.E., Member of the Viceroy's Legislative Council  
Walter Guley Madge, Esq., C.I.E., Member of the Viceroy's Legislative Council  
Abdur Rahim, Esq., Judge of the Madras High Court  
James Ramsay MacDonald, Esq., M.P.  
Herbert Albert Laurens Fisher, Esq., Fellow and Tutor of New College, Oxford  
The Terms of Reference were as follows—  
To examine and report upon the following matters in connection with the Indian Civil Service, and other civil services, Imperial and Provincial—  
1) The methods of recruitment and the systems of training and probation,  
(2) The conditions of service, salary, leave, and pension



the said sections thirty-two and thirty-seven shall apply to the rules made under this section. This Act may be cited as the Indian Civil Service (Temporary Provisions) Act, 1917.

In the debate on the second reading of the Bill Lord Johnston explained that this was an emergency Bill introduced to meet the difficulties caused by the condition of Government at the present time. He said that the Government had introduced this Bill to meet the emergency and to provide a method by which those who were appointed to the service should be able to continue in the service as far as possible. He said that the Bill was introduced to provide a method by which those who were appointed to the service should be able to continue in the service as far as possible. He said that the Bill was introduced to provide a method by which those who were appointed to the service should be able to continue in the service as far as possible.

Lord Johnston further raised the question of the composition of the Selection Board and moved an amendment under which the board would consist of not more than three members, including the First Civil Service Commissioner, a member of authority in public affairs, and representatives of the Universities and the public schools. On the suggestion of Lord Johnston, he added that there should be at least one member with a knowledge of India. By an amended sub-section it has been provided that no person shall be appointed to the service unless he possesses the necessary educational qualification. The design is to check any arbitrary use of the powers of the Secretary of State, and to prevent favoritism toward the unit.

## THE INDIAN MEDICAL SERVICE.

The Medical Service under the control of the Government of India consists of some seven hundred and sixty-eight medical men recruited in England by competitive examination and has as its primary duty the care of the native troops and of the British Officers in London, for the care of the people and soldiers in the Indian "Factories," and on the ships trading with the East. Besides these men the Company maintained several medical services, including those of St Helena, the West Coast of Sumatra, Prince of Wales Island and the China Coast. The Surgeons on the Company's Indianmen were frequently utilized for emergency work in India, as in the case of the Maratha War of 1780 and other military operations of that time for duty with troops, and sometimes to fill vacancies occurring among those who would now be styled "civil surgeons."

**Organisation.**—The Indian Medical Service practically dates from the year 1764 when the scattered medical officers serving in India were united into one body later, this was divided into the three medical "Establishments," of Bengal, Madras, and Bombay. In 1766, the Medical Service was divided into two branches, military and civil, the latter being regarded as primarily army medical officers, lent temporarily for civil duties, in which they formed a reserve for the Indian Army, and were consequently liable to recall at any time. This position was confirmed by the Council of Lord Cornwallis in 1783, and has been in existence ever since with great advantage to the military authorities in times of military stress. In 1898, the officers of the Service were given military rank, and since 1906 all the names have been borne on one list, though men on entering the service are allowed to elect a Presidential in which they will serve on entering the Civil Department.

This remarkable combination of duties and responsibilities in a single Service has slowly but steadily increased throughout the years, and has been in existence ever since with great advantage to the military authorities in times of military stress. In 1898, the officers of the Service were given military rank, and since 1906 all the names have been borne on one list, though men on entering the service are allowed to elect a Presidential in which they will serve on entering the Civil Department.

The Service was thrown open to Indians by the India Act of 1855, the first competitive examination being held in January 1855, when the list was headed by a Bengalee student who subsequently attained distinction. It was calculated by Lt-Col Crawford, I.M.S., (the talented historian of the Service) that from January 1855 to the end of 1911, eighty-nine men of pure Indian extraction had entered the Service. The proportion now shows signs of yearly increase. The total number of Indians at present in the Service is a little more than five per cent of the whole, while, of the successful candidates during the past five years, 17.6 per cent have been men born and bred in the country.

**Method of Entry**—Entrance into the Service is now determined on the results of competitive examinations held twice a year in London, the Regulations regarding which, and pension relating thereto, may be obtained on application to the Military Secretary at the India Office. Candidates must be natural-born subjects of His Majesty, of European or East Indian descent, of sound bodily health, and, in the opinion of the Secretary of State for India in Council in all respects suitable to hold commissions in the Indian Medical Service. They may be married or unmarried. They must possess, under the Medical Acts in force at the time of their appointment, a qualification registrable in Great Britain and Ireland. No candidate will be permitted to compete more than three times. Candidates for the January examination in each year must be between 21 and 28 years of age on the 1st February in that year, and candidates for the July examination must be between 21 and 28 years of age on the 1st August.

The candidate will be examined by the Examining Board in the following subjects, and the highest number of marks obtainable will be distributed as follows—

(1) Medicine, including Therapeutics 1,200 Marks

(2) Surgery, including diseases of the eye 1,200 "

(3) Applied Anatomy and Physiology 600 "

(4) Pathology and Bacteriology 600 "

(5) Midwifery and Diseases of Women and Children 600 "

(6) Materia Medica, Pharmacology and Toxicology 600 "

N.B.—The Examination in Medicine and Surgery will be in part practical, and will include operations on the dead body, the application of medical and surgical apparatus, and the examination of medical and surgical patients at the bedside.

Having gained a place at the entrance examination, the successful candidates will be commissioned as Lieutenants on probation, and will be granted about a month's leave. They will then be required to attend two successive courses of two months each at the Royal Army Medical College, and at Aldershot respectively in the larger towns. His duties are to give

Officers appointed to the Indian Medical Service will be placed on 'one list,' their position on it being determined by the combined results of the preliminary and final examinations. They will be liable for military employment in any part of India, but with a view to future transfers to civil employment, they will stand posted to one of the following civil areas—(1) Madras and Burma, (2) Bombay, with Aden, (3) Upper Provinces, i.e., United Provinces, Punjab and Central Provinces, (4) Lower Provinces, i.e., Bengal, Bihar and Orissa and Assam. The allocation of officers to these areas of employment will be determined upon a consideration of all the circumstances, including as far as possible the candidates' own wishes. The whole course lasts for four months, after which the duly gazetted Lieutenants proceed to India, and for the first years of their service are attached to native regiments in any part of the country. The doctor is an officer of the regiment, as was the case in the old days of the Army Medical Department. Of late years it has been proposed to form the members of the Service into a corps on the lines of the British Medical Service, by thereby releasing the doctor from regimental forming station hospitals for native troops, and all respects suitable to hold commissions in the Indian Medical Service. They may be married or unmarried. They must possess, under the Medical Acts in force at the time of their appointment, a qualification registrable in Great Britain and Ireland. No candidate will be permitted to compete more than three times. Candidates for the January examination in each year must be between 21 and 28 years of age on the 1st February in that year, and candidates for the July examination must be between 21 and 28 years of age on the 1st August.

**Organisation.**—The Head of the Service is the Director General, who is an official of the Government of India and his adviser on medical matters. He is also concerned with questions of promotion of officers to administrative rank and of the selection of men for admission to the civil department attached to his office and under his general supervision is the Sanitary Commissioner with the Government of India, who is to have the control of the new Sanitary Service, a department which is undergoing enlargement and re-arrangement. In each Presidency or Province there is a local head of the civil medical service and medical adviser of the local administration, who is either a Surgeon General, or an Inspector of Civil Hospitals of the rank of Colonel. The medical service in each province consists of the Sanitary Branch and the purely professional. The former is composed of Sanitary Commissioners of Districts, who by keeping large tracts of country under observation are in a position to advise their respective Governments of the existence of epidemics, and on the proper methods of dealing with them and of preventing their spread. It is, however, through the Civil Surgeon that the visitor to India will come in contact with the Service. This official is something more than a general practitioner, as he is expected to be the leading medical and surgical authority in a large district consisting of a million or more of souls. Owing to the varied experience obtained in India by the members of the Civil Medical Department, this official is generally a man of the highest professional attainments, especially so in the case of those senior men holding appointments in the larger towns. His duties are to give

Grade Pay	Staff Pay	Uncomp'd Pay
Rs 1,500	Rs 1,500	Rs 1,500
Rs 1,400	Rs 1,400	Rs 1,400
Rs 1,300	Rs 1,300	Rs 1,300
Rs 1,200	Rs 1,200	Rs 1,200
Rs 1,100	Rs 1,100	Rs 1,100
Rs 1,000	Rs 1,000	Rs 1,000
Rs 900	Rs 900	Rs 900
Rs 800	Rs 800	Rs 800
Rs 700	Rs 700	Rs 700
Rs 600	Rs 600	Rs 600
Rs 500	Rs 500	Rs 500
Rs 400	Rs 400	Rs 400
Rs 300	Rs 300	Rs 300
Rs 200	Rs 200	Rs 200
Rs 100	Rs 100	Rs 100
Rs 50	Rs 50	Rs 50

— The following is a list of the names of the persons who have been appointed to the various positions in the various departments of the Government of the State of New York, for the year 1900.

The Government of the United States is not a party to the dispute between the Government of the United Kingdom and the Government of the United Kingdom. The Government of the United States is not a party to the dispute between the Government of the United Kingdom and the Government of the United Kingdom.

**Pensions and Half-Pay**—Officers are allowed to retire on pension on completing 17 years service, the amount they receive varying with the precise number of years they have served. The lowest rate for 17 years' service is £300 per annum, and the rate for 30 years £700 per annum. The increases in pension for each additional year's service over 17 are somewhat higher in the last 5 than in the first 8 of the 13 years between the shortest and longest periods of pensionable service. All officers of the rank of Lieutenant-colonel and major are placed on the retired list on attaining the age of 55 years the greatest age to which any officer can serve being 62.

Principal Civil Appointments	Approximate Number of Appointments in each Class	Salary per Annum		
		When held by a Lieutenant-Colonel	When held by a Major	When held by a Captain
		When held by a Lieutenant-Colonel	When held by a Major	When held by a Captain
		When held by a Lieutenant-Colonel	When held by a Major	When held by a Captain

Inspectors-General of Civil Hospitals ..	6	2,250-2,500				
Sanitary Commissioner with Government of India	1	2,000-2,500				
Inspectors-General of Prisons	8	1,500-2,000				
Principals of Medical Colleges	5	1,650-1,800	1,200-1,300			
Proctorial Appointments	32	1,500-1,650	1,050-1,150	800-950		750
Sanitary Commissioners	8	1,250-1,800 for all ranks				
Deputy Sanitary Commissioners	13	1,450-1,600	1,000-1,100	750-900		700
Bacteriological Appointments	11	1,500-1,600	1,050-1,150	700-900		650
Superintendents of Central Lunatic Asylums	6	1,400-1,550	1,050-1,150	700-900		650
Superintendents of Central Gaols	31	1,300-1,550	850-1,050	600-850	550-650	
Civil Surgeons (First Class)	37	1,300-1,450	850-950	600-750		550
Civil Surgeons (Second Class)	171	1,200-1,350	750-850	500-650		450
Probationary Chemical Examiner	1			600-750		550
Officers deputed to Plague Duty	20	1,450	1,000-1,100	750-900		700

# Pilot Services

Appointments to the Bengal Pilot Service are made by the Secretary of State for India and by the Government of Bengal, the latter appointments are limited to Anglo-Indians and Europeans. In the case of appointments made by the Secretary of State, preference is given to candidates who have passed through the "Worcester" and "Convey" examinations, and to candidates for the training ships "Worcester" and "Convey".

Candidates for the Secretary of State's appointments, without exchange compensation allowance —

The rates of pay and allowances of a square rigged sailing vessel of over 200 tons having served at sea not less than two years, for a foreign going ship, and competence as a Board of Trade or Colonial Certificate of more than 22 years of age. They must not be less than 18 and not

Pls 50 per cent of the fixed money collected from the ships on which they do duty

When employed as Chief and Second Officer —

Junior Leadsmen	107 a month
Second Mate Leadsmen	135 a month
First Mate Leadsmen	160 a month

Chief Officers of pilot vessels, Rs. 180 a month

As Second Officers of pilot vessels Rs. 135 a month

Plus a mess allowance of Rs. 40 a month

After five years' service a Leadsmen's appointment is allowed to appear at an examination as Mate Pilot, and, if successful, is promoted to that grade on the occurrence of a vacancy. Vacancies which by promotion from the grade of Pilot are filled by men who have passed the examination. If that Pilot Branch Government has reason to believe of any kind, is, owing to physical unfitness or otherwise, incapable of discharging his duties properly, it arranges for his medical examination and takes such action as may seem desirable when the results of that examination are communicated. In particular, Pilots are medically examined after the occurrence of any accident to the vessel in their pilotage charge. If the circumstances tend to show that the accident was in any way attributable to physical unfitness on the part of the Pilot

After three years' service rules for entry into the service are drawn up by the Port Trust in Bombay, for example, elsewhere pilotage is under the control of the province that has a coast-guard pilot service. To be eligible for admission to the Bengal Pilot Service, candidates must be not less than 22 years of age, and must have passed the examination in the Port Office and also an examination in the Port Office and also an examination in the Port Office and also an examination in the Port Office.

Other Pilot Services — Bengal is the only port in India where pilotage is under the control of the Government of Bengal, for example, in Bombay, the Port Trust has drawn up the following rules for entry into the service

To be eligible for admission to the Bengal Pilot Service, candidates must be not less than 22 years of age, and must have passed the examination in the Port Office and also an examination in the Port Office and also an examination in the Port Office.

Pilots are not entitled to any salary while on pilotage duty, but receive 50 per cent but form a portion of the Government dues on pilotage duty, but receive 50 per cent but form a portion of the Government dues on pilotage duty.

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# The Indian National Congress.

BY D. E. WACHA.

The Congress was practically founded in reference Unfortunately, when the preparation of the late Mr. Allan Octavian Hume, a retired member of the Indian Civil Service, and the son of the distinguished Joseph Hume, M.P., whose radicalism is so well known, and who was one of the chief advocates of the reform in the House of Commons in the forties or fifties. Mr. Hume had a distinguished career in the service. In his younger days when Collector and Magistrate at Lucknow, he had rendered invaluable service in quelling the Mutiny in its incipient stage. For this service he was created a Civil Companion of the Bath, a rare honour in those days for a young Anglo-Indian Civil Servant. He retired from the service in 1883 after having honourably filled several high offices, the last of which was the Home Secretaryship of the Government of India. The policy of Lord Lytton's Government (1878-80) had aroused discontent in the country. The imposition of the Vernacular Press Act, commonly known as the Black Act, and the uncalculated for hostilities with the Amir Shere Ali of Afghanistan which culminated in the Second Afghan War were the subject of much adverse criticism among the most moderate but enlightened Indians in all parts of the country. It was recognised in all quarters that the people should organise themselves by way of a counterforce to ventiliate their grievances. Correspondence was passing among the Indian leaders of thought in the different provinces as to the formation of such a conference on a sound and permanent footing. The necessity of Lord Ripon (1880-84) gave the necessary stimulus and encouragement. Thus by 1883, when Mr. Hume retired, the idea of the Conference had so far taken body and form that, with the sympathetic support of Mr. Hume, a Union was established after he had in 1883 the genuine support of many sterling friends of India in Parliament, especially John Bright and Mr. Stagg. Mr. Hume had been a silent but watchful observer of events to the movement, his heart being fully prepared to co-operate the social, economical and political condition of the Indians. He was in close communication with the leaders in various provinces. Here it may also be worth while recording the fact that during the preliminary stage of the inception of the Congress, Mr. Hume, who had retired to Simla, had had the opportunity of consulting Lord Dufferin on the subject and it is a fact that his Lordship was at one with the object and greatly encouraged Mr. Hume in his mission. Subsequently after 1883 his Lordship, for reasons of his own, which have never been authoritatively decided, chose to assume a hostile attitude toward the organisation but it was effectively met by the speech which Mr. George Yule made in December 1883 at the Congress of Allahabad.

## First Session

Program was so far made as to formulate the programme of a first meeting in Poona which at the time was the seat of great political activity. The Christmas week of 1885 was resolved upon for the inauguration of the Congress. It was on the fundamental principles above stated that the Congress carried out its appointment. It was on the fundamental principles above stated that the Congress carried out its appointment. It was on the fundamental principles above stated that the Congress carried out its appointment.

## The Split

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be repeated here, as it should dispel all doubts, and objects of the Congress.

"The objects of the Indian National Congress are the attainment by the people of India of a system of Government similar to that enjoyed by the self-governing members of the British Empire, and a participation by them in the rights and responsibilities of the Empire on equal terms with those members. These objects are to be achieved by constitutional means, by bringing about a steady reform of the existing system of administration and by promoting national unity, fostering public spirit and developing and organising the intellectual, moral, economic and industrial resources of the country."

Every delegate to the National Congress is obliged by the Congress Committee of the province from which he is sent to express in writing his acceptance of the above creed and his willingness to abide by the Constitution and the rules framed under it.

The Constitution

This Constitution has been in full working order since 1905. It is unalterable save by a resolution of a majority in Congress assembled. It provides a guiding or directing staff of chosen leaders selected by each province and annually brought forward for the consideration of the Congress and all cognate matters. The Congress declares each year at the close of the session town or city where it is to be held begins to make all preparations fully six months before the date of the holding of the session which has hitherto invariably been during the three days immediately succeeding Christmas Day. That period is specially selected owing to the great convenience it affords to all classes of delegates in the country to attend—a convenience not offered at any other time during a year. A Reception Committee is formed with a leading person as its Chairman. That Committee divides its work among various sub-committees such as finance, correspondence, housing, feeding and so on. A band of active young persons volunteer to serve the different sub-committees. Formerly they were chiefly selected from among the student class but owing to the orders of the Government in the Education Department that students should take no active part in politics, volunteers are now wholly recruited from the circle of men of business or profession. They are well described and have to obey the orders of their chief or captain. They have a heavy duty to discharge during the active session, besides receiving delegates from various centres on railway platforms and taking them down to their appointed lodgings. Volunteers are also posted among delegates to carry their messages or do such other work as may be needed. Thus their discharge honours a very important service with enthusiasm and alacrity and in a way learn discipline and the spirit of self-sacrifice. In his concluding address a President invariably makes honourable mention of the services of these Congress volunteers. The hardest work of a sub-committee consists of erecting the pendal or marquee for the holding of the Congress. Apart from the delegates who generally number from 500 as a minimum to 1,000 or so as a maximum there is always a large number of visitors. So that the pendal is erected to contain at least 5,000 seats. There have been some notable Congresses when the number seated has come to as many as 10,000. That was the number which congregated in Bombay in 1889 when Sir William Wedderburn presided and was accompanied from London by the late Mr Charles Bradlaugh who afterwards introduced the first Reform Bill of the expanded Legislature in Parliament in 1890. Delegates had to pay a fee of Rs 20 for attendance up till 1912 but the fee has since been reduced to Rs 15. They are lodged in bungalows at their own expense, but the majority of delegates outside those of the province where a Congress is held, generally accept Congress accommodation which in smaller towns becomes a very serious and uphill task indeed. The supply of chairs and other paraphernalia is also a heavy task, but they all undertake it cheerfully as a matter of duty.

A Session

The spectacular effect of a large gathering in a capital town like Bombay or Calcutta or Madras is exceedingly pleasing, while the proceedings, the stranger visiting the Congress, whether he is accommodated on the day or the five hours a day of each of the three days are keen to attend the congress and watch its deliberations. Congress expenses at the very lowest estimate come to between Rs 25,000 and Rs 30,000 per annum. The funds are collected (a) from donations of wealthy sympathisers of the Congress Movement in the province where the Congress is held, (b) from delegation fees, half of which is shared by the British Congress Committee, and (c) as the London organization of the Congress known as the Reception Committee, there is rarely a balance left, sometimes there is a deficit. The Reception Committee, as soon as convenient, issues a full report of the three days' proceedings of the Congress together with a list of the delegates who attended. For a few years an industrial exhibition was opened in

India. The Committee of each Province is called the Provincial Congress Committee on whom devolves the duty, under the constitution and the rules, of calling meetings for the election of delegates, suggesting subjects to be brought forward for the consideration of the Congress and all cognate matters. The Congress declares each year at the close of the session town or city where it is to be held begins to make all preparations fully six months before the date of the holding of the session which has hitherto invariably been during the three days immediately succeeding Christmas Day. That period is specially selected owing to the great convenience it affords to all classes of delegates in the country to attend—a convenience not offered at any other time during a year. A Reception Committee is formed with a leading person as its Chairman. That Committee divides its work among various sub-committees such as finance, correspondence, housing, feeding and so on. A band of active young persons volunteer to serve the different sub-committees. Formerly they were chiefly selected from among the student class but owing to the orders of the Government in the Education Department that students should take no active part in politics, volunteers are now wholly recruited from the circle of men of business or profession. They are well described and have to obey the orders of their chief or captain. They have a heavy duty to discharge during the active session, besides receiving delegates from various centres on railway platforms and taking them down to their appointed lodgings. Volunteers are also posted among delegates to carry their messages or do such other work as may be needed. Thus their discharge honours a very important service with enthusiasm and alacrity and in a way learn discipline and the spirit of self-sacrifice. In his concluding address a President invariably makes honourable mention of the services of these Congress volunteers. The hardest work of a sub-committee consists of erecting the pendal or marquee for the holding of the Congress. Apart from the delegates who generally number from 500 as a minimum to 1,000 or so as a maximum there is always a large number of visitors. So that the pendal is erected to contain at least 5,000 seats. There have been some notable Congresses when the number seated has come to as many as 10,000. That was the number which congregated in Bombay in 1889 when Sir William Wedderburn presided and was accompanied from London by the late Mr Charles Bradlaugh who afterwards introduced the first Reform Bill of the expanded Legislature in Parliament in 1890. Delegates had to pay a fee of Rs 20 for attendance up till 1912 but the fee has since been reduced to Rs 15. They are lodged in bungalows at their own expense, but the majority of delegates outside those of the province where a Congress is held, generally accept Congress accommodation which in smaller towns becomes a very serious and uphill task indeed. The supply of chairs and other paraphernalia is also a heavy task, but they all undertake it cheerfully as a matter of duty.

connection with the Congress which is the parent of the Industrial Conference. They were all very successful the most notable being the one held in Bombay on the occasion of the Congress Meeting there in 1904

The most important function of the Reception Committee under the Constitution is to elicit the opinion of the different Provincial Congress Committees as to the selection of a capable President, a well known Congressman who has taken an active part from year to year in the work of the Congress, not only on the Congress platform, but in his own part of the country by way of propagating the aims and objects of the Congress and educating the people. The Provincial Committees are enjoined to send the names of the person or persons whom they would select, say, by the end of September of each year, to the Reception Committee of the place where the Congress is to be held. The name selected by the majority of that committee is accepted and is announced to all centres. The President-elect receives official intimation of his selection and thereafter begins to prepare his "Address" reviewing the principal political events of the year and suggesting what important resolutions the Congress should pass. The Reception Committee who provide a suitable lodging for him and cater for his comfort and convenience. He is waited upon by two or four volunteers who deem it a personal honour to have so waited on him. On his arrival he is generally received with an ovation and a public demonstration in the form of a procession. There have been distinguished presidents who have been so conveyed to their destination amidst the most enthusiastic cheers of the population, men, women and children.

On the opening day the President reaches the day accompanied and followed by the Congress officers, namely, the General Secretaries, the Secretaries and Chairmen of the Reception Committee and the ex-Presidents who may be attending the Congress as soon as they are seated, a song is heard to announce the commencement of the sessions. The Chairmen of the Reception Committee begins the proceedings by welcoming the delegates and touching upon the peculiarities of his city and on some provincial and other problems. Immediately thereafter the President is formally installed in the chair in terms of the Constitution. The chief proposer generally introduces him to the audience in a brief speech enumerating what he is and what he has done for the country. Next the President rises in his place amid cheers and applause. Generally, the speech is written and printed. It is read a half. He surveys the prevailing political situation, echoes Indian public opinion as expressed in the various organs during the year on problems of administration, and winds up with recommendations and suggestions for further reforms.

On the conclusion of the address a Subjects Committee from among the delegates is selected and announced from the Chair. With- in half an hour or an hour at a hour or two

### Results

Of the oldest class of Congress-men, say since its institution in 1885, there are a few only, say, the Hon'ble Mr Surendranath Banerji, the Hon Mr M M Malaviya, the Hon Mr J Ganagan Prasad Varma, Mr D. B. Wadwa, Mr P. N. Mithalakar, Mr D. A. Khar and a few others. The composition of the Congress undergoes a change every few years. Looking back at the quarter of a century and more, it must be acknowledged that on the whole the Congress has done good solid work for the greater progress of the people. In reality it is a body of as Lord Lansdowne

of the Subjects Committee. Then they discuss the most important topics needing resolutions to be passed the following day. Here you see Congress delegates earnestly at their work. It is a kind of select committee of the House of Commons. Debaters, most eloquent debaters, are often to the fore and make short speeches. A draft resolution is moved, backed and eventually knocked into shape, votes being always taken by a show of hands, and the chairman announcing the ayes or the noes as the case may be. In this way generally half a dozen important resolutions are passed. It is the duty of the Congress Secretaries to see that they immediately go to the press and are ready after correction and revision for the next day's session at noon. The general duration of a Subjects Committee for two days in succession is fully three hours. Sometimes it is exceedingly controversial matters prolonging it by another hour. Thus it will be seen that the real solid work of a Congress session is done at the meetings of the Subjects Committee which contains the pick of the delegates attending a Congress.

The proceedings of the session in open Congress are regulated by the rules of order and amendments are permitted to any delegate provided he gives notice to the President on the day during the course of the particular resolution which may be moved. Votes by a show of hands are taken for and against. There are rules for special voting but these are rarely invoked, the fact being that harmony generally prevails owing to the merits of a resolution having been fully thrashed out at the Subjects Committee meeting. The principal speakers and supporters are all selected by the Subjects Committee, but a President may permit a speaker not named in the agenda. Rhetoric is absent save in some cases. There is ample eloquence and hundreds of the speeches are all extempore, of course the speakers preparing their principal observations beforehand. But what is known as "manuscript eloquence" is exceedingly rare. At the close of the proceedings, generally on the evening of the third day, the President is voted thanks and he makes a suitable reply. The session is then dissolved after the customary announcement of the next place where it is to be held.

Results

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British Committee

It may be observed in conclusion that the Congress has an organisation also in London which is called the British Committee of the Congress. It is furnished with funds provided by the Indian National Congress. It has an establishment of its own and attached to it, though with independent income, an organ of opinion, called "India", which echoes the salient events of what may have happened every week in India as such it performs useful service. It is well informed and is liberally circulated among members of Parliament who sympathise with Indian aspirations or take interest in the general progress and welfare of India. The Committee consists of retired Anglo-Indians and has been for years presided over by that well-wisher and distinguished friend of India, Sir William Wedderburn, who was twice elected President of the Congress or leading Indians when in London to take part in its deliberations. The Committee itself is in constant touch with all proceedings in the House of Commons on Indian affairs and often helps members to put questions when needed. Some years ago it formed a standing committee of members of the House of Commons and an attempt is about to be made to revive it. The Committee also keeps itself in communication with the India Office and often acts as a vehicle of conveying Indian opinion to the Secretary of State as such the organization renders valuable service to the Indian cause in England. The 1913-16 session held in Bombay under the presidency of Sir S. P. Sinha, one time Law Member of the Viceroy's Executive Council, was largely attended and the proceedings were marked by much enthusiasm. The President, whilst recognising that the Empire was necessary in order to still the pain in the soul of awakening India remarked himself with those who saw that the path thither would be long and wearisome. The Congress embodied its political aspirations in the following resolution—(a) the introduction of Provincial autonomy including financial independence, (b) so as to make them truly and adequately representative of all sections of the people and to give them effective control over the act of the executive government, (c) the re-constitution of the various existing executive councils and the establishment of similar executive councils in provinces where they do not exist (d) the reform or the abolition of the Council of the Secretary of State for India, (e) establishment of Legislative Councils in provinces where they do not now exist, (f) the readjustment of the relations between the Secretary of State for India and the Government of India, and (g) a liberal measure of local self government.

called it when he was Viceroy in India. As such its programme is always for liberal reforms. It cannot be gainsaid that the traditional Councils are fundamentally owing to the continuous vigorous agitation of the Congress. The first reform took place in 1892 but it was discovered in a few years that the popular elective representation was inadequate, that there was no free discussion of the budget on the principle of taxation and representation, and that the privilege of interpellation, given in 1892 needed improvement and expansion. The Morley-Minto Reforms are entirely owing to the initiation and subsequent agitation of the Congress. It was also owing to the same organisation that the salt duty has eventually been reduced from 2½ to 1½ per maund. The higher limit of exemption from the income tax was also recommended by the Congress. It uniformly advocated the importance of the construction of irrigation works in preference to railways. Its structures on the past management of famine relief have been instrumental in bringing the Famine Relief arrangements almost wholly owing to Congress agitation and technical have undergone an unprecedented development. Sabitration owes its present condition partly to the Congress. The hardships involved in the original drastic codes on excise and forests have been somewhat mitigated by reason of the earnest prayers of the Congress. Land revenue assessments have received continual attention from the Congress, which is more or less in favour of a settlement as near to permanency as possible. But the voice of the Congress is still crying in the wilderness as far as simultaneous examinations and the separation of judicial and executive functions are concerned. Its agitation is consistent and persistent. Its appeals on behalf of Indians in South Africa and elsewhere have always been earnest and accompanied by moderation. On currency problems it has hitherto failed to see eye with the State. In short, it may be correctly said that a fairly large number of grievances of the people which the Congress has voiced during the last 28 years have been redressed. The principal plans of its platform for some time are a great extension of the employment of Indians in the higher offices of the administration in reference to which the Public Services Commission has taken evidence, retrenchment of military expenditure, fiscal independence, notably in the matter of the excise duty on indigenous cotton manufactures, reform in the administration of criminal justice, in which is included the separation of judicial from executive functions, and the equal privilege of Indians as citizens of the British Empire in all parts of His Majesty's Dominions.



## A Split

The position in regard to the 1915-16 session of the League was peculiar. In April of 1915 a regular was sent round asking for signatures to a requisition to the Council of the League or inviting it to hold its session in the city of Bombay, it being the intention to arrange the meeting practically to coincide with those of the Indian National Congress. In sending round this circular the officers of the Bombay Presidency Branch of the League were in large part individually informed. When the facts became known a strong local feeling was manifested against the proposed session, and a large number of the League withdrew and formally notified their withdrawal. Notwithstanding these facts the League was pushed forward, and later in the year the Council, meeting at Lucknow, announced that a majority of the Provincial League was in favour of holding the session. There was a public meeting of the Mohammedans of the city of Bombay, estimated to number ten thousand, was held at which a resolution was unanimously carried deprecating the holding of the session during the continuance of the war and expressing confidence in the Government of Bombay for its action and called a conference of the two parties with a view to an adjustment of the difficulties that had arisen. Afterwards a committee was issued in which the results of the Conference were set out in the following terms —

In consequence of the differences of opinion which had arisen among the Mohammedans of Bombay in regard to the forthcoming sessions of the All India Moslem League at Bombay, and the all India Moslem League at Bombay, other organisations regarding political reform

His Excellency the Governor was approached with the view of securing His Excellency's advice and sympathy in composing these differences. As a result a conference was held at the Secretariat on the 3rd December, 1915, at which His Excellency was pleased to preside. The Honourable Sir Ali Imam was also present and assisted with his advice. The following was agreed to:

The All India Moslem League do hold its sessions at Bombay and pass a resolution or loyalty to Government.

The League may also, if it so desires, proceed to appoint a Committee which shall have power to confer with such political and other organisations as they may deem fit with a view to formulating a scheme or reform, having due regard for the needs of Mohammedans. The report of the Committee to be presented at the next annual session of the All India Moslem League.

The League do pass a resolution praising His Majesty's Government to extend the term of office of His Excellency Lord Hardinge, Fazl Tjabb, Bar at Law, Fazlulhaq (ur Rimbohy, Kt, Muhammad Darn Hakim, Abdullah Shah, J P, Sherif Deyi Kaji, Sulaiman Abdul Wahid, Sulaiman Kasim, Mitha, Rabbuddin Ahmad, M A Jinnah, Bar at Law.

The meeting of the League under these conditions was held in Bombay on December 30th and 31st and was presided over by Mr Jinnah-ul-Haque or Bankipore. The President's address, when it formulated his views on the subject of political changes, conformed in most respects to those advanced by the Congress in the preceding days (vide p 489). In addition, he asked for such a peace with Turkey at the close of the war as would be compatible with the sentiments of the Mohammedans. The League at the second day of the session appointed a committee to confer with other organisations regarding political reform.

## The Press.

The newspaper Press in India is an essentially English institution and was introduced soon after the task of organising the administration was seriously taken in hand by the British Government. In 1773 was passed the Regulating Act creating the Governor-General and the Supreme Court in Bengal and within seven years at the end of the same decade, the first newspaper was started in Calcutta by an Englishman in January 1780. Exactly a century and a third has elapsed since, not a very long period certainly, a period almost measured by the life of a single newspaper, *The Times*, which came into existence only five years later in 1785, but then the period of British supremacy is not much longer, having commenced at Plassy, only twenty-three years earlier. Bombay followed Calcutta closely, and Madras did not lag much behind. In 1789 the first Bombay newspaper appeared, *The Bombay Herald*, followed next year by *The Bombay Courier*, a paper now represented by *The Times of India* with which it was amalgamated in 1881. In Bombay the advent of the press may be said to have followed the British occupation of the island much later than was the case in Calcutta. In Calcutta the English were on sufferance before masters after 1665, and it is somewhat strange that no Englishman should have thought of starting a newspaper during all those hundred and twenty-five years before the actual advent of *The Herald*. The first newspaper was called *The Bengal Gazette* which is better known from the name of its founder as *Hicky's Gazette* or *Journal*. Hicky like most pioneers had to suffer for his enterprising spirit, though the fault was entirely his own, as he made his paper a medium of publishing gross scandal, and he and his journal disappeared from public view in 1782. Several journals rapidly followed Hicky's, though they did not fortunately copy his bad example. *The Indian Gazette* had a career of over half a century, when in 1833 it was merged into the *Bengal Harbair*, which came into existence only a little later, and both are now represented by *The Indian Daily News* with which they were amalgamated in 1866. No fewer than five papers followed in as many years, the *Bengal Gazette* of 1780, and one of these, *The Calcutta Gazette*, started in February 1784, under the avowed patronage of Government, but issues still as the official gazette of the Bengal Government.

From its commencement the press was jealously watched by the authorities, who put serious restrictions upon its independence and pursued a policy of discouragement and rigorous control. Government objected to news of apparently the most trivial character affecting its servants. From 1791 to 1799 several editors were deported to Europe with- out trial and on short notice, whilst several more were censured and had to apologise at the commencement of the rule of Wellesley, the Government promulgated stringent rules for the public press and instituted an official censor to whom everything was to be submitted before publication, the penalty for offending against these rules to be immediate deportation.

These regulations continued in force till the time of the Marquis of Hastings who in 1818 abolished the censorship and substituted milder rules of this press, for henceforward self-respecting and able men began slowly but steadily to join the ranks of journalists, which had till then been considered a low profession. Sir Buckinghams, one of the ablest and best known of Anglo-Indian journalists of those days, availed himself of this comparative freedom to criticise the authorities, and under the short administration of Adair, a civilian who temporarily occupied Hastings's place, he was deported under rules specially passed. But Lord Amherst and still more Lord William Bentinck were persons of broad and liberal views, and under them the press was left practically free, though there existed certain regulations which were not enforced, though Lord Clare, who was Governor of Bombay from 1831 to 1835, once strongly urged the latter to enforce them. Bentinck, removed for a brief period Bentinck, removed even these regulations, and brought about what is called the emancipation of the press in India in 1835, which was the beginning of a new era in the history of the Indian press. Among papers that came into being, was the *Bombay Times* which was started towards the close of 1838 by the leading merchants of Bombay, and which in 1861 changed its name to *The Times of India*. *The Bombay Gazette*, founded in 1791, ceased publication in 1914. The liberal spirit in which Lord Hastings had begun to deal with the press led not only to the improvement in the tone and status of the Anglo-Indian press, but also to the rise of the Native or Indian Press. The first newspaper in any Indian language was the *Samachar Durpan* started by the famous Serampore Missionaries Ward, Carey and Marshman in 1818 in Bengali, and it received encouragement from Hastings who allowed it to circulate through the post office at one-fourth the usual rates. This was followed in 1822 by a purely native paper in Bombay called the *Bombay Samachar* which still exists, and thus was laid the foundation of the Native Indian Press which at the present day is by far the largest part of the press in India, numbering over 650 papers.

From 1835 to the thirty the press spread to other cities like Delhi, Agra, Gwalior, and even Lahore, whereas formerly it was chiefly confined to the Presidency towns. During the thirty its freedom had to be temporarily controlled by the Gagging Act which Cannan passed in June 1857 on account of the license of a very few papers, and owing still more to the fears of its circulating intelligence which might be prejudicial to public interests. The Act was passed only for a year at the end of which the press was once more free.

On India passing to the Crown in 1858, an era of prosperity and progress opened for the whole country in which the press participated. There were 19 Anglo-Indian papers at the beginning of this period in 1858 and 25 Native papers and the circulation of all was very small. The number of the former did not show a great rise in the next generation, but the rise in in-



Newspapers and News Agencies registered under the Press Rules and arranged alphabetically according to Station where they are published and situated.

NOTE—News Agencies are distinguished by an asterisk

Stations	Title in full	Day of going to Press
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Agra	Kayastha Hitkari Ahmedabad Samachar Coronation Advertiser Gujarati Punch Jaina Samachar Kathliwar and Mahikanttha Gazette Political Bhomiyao Prja Bandhu Rajasthan Rastan Samachar Berar Samachar Arahan Times Arahan News Aligarh Institute Gazette	1st, 8th, 16th, and 24th of every month Every day Wednesdays Sundays Sundays Sundays Thursdays Saturdays Fridays Thursdays Sundays Mondays and Thursdays.
Ahmedabad	Aligarh Institute Gazette	Wednesdays
Aligarh	Aligarh Institute Gazette	Wednesdays
Allahabad	Ahyudaya Hindustan Review Leader Pioneer Reuters Telegram Company, Ltd Kartavya Prmod Sindh Veer Shalo Sanjeevinee	Fridays On first of every month Daily, except Tuesdays Daily Tuesdays Mondays Thursdays Saturdays Sundays
Amraoti	Islam Gazette Itihad Jagaran	Thursdays Saturdays Sundays
Bangalore	Daily Post Army and Civil News Kasim-ul-Akbar	Daily Daily Mondays and Thursdays.
Bankipore	Behar Bhandu Behar Herald Beharee Express	Fridays Saturdays Daily Tuesdays, Thursdays and Saturdays
Barisal	Barisal Hitkari Shree Sayaji Vilaya Bassein News Lamp Belgaum Samachar	Sundays Thursdays Tuesdays and Fridays. Every other Saturday Mondays
Baroda, Bassein, Batticaloa (Ceylon)	Barisal Hitkari Shree Sayaji Vilaya Bassein News Lamp Belgaum Samachar	Sundays Thursdays Tuesdays and Fridays. Every other Saturday Mondays
Benares City	Awazi Khalk Bharat Jivan Indian Student	Every Wednesday Sundays. 27th of each month Tuesdays Wednesdays Saturdays
Bihar (Patna)	Jainasnan Hitkari Karnatak Vaidya	Tuesdays Wednesdays Saturdays

1911

100

1. The first step is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

10

100

100

1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.

11

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1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.

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וְהָיָה כִּי יִשְׁמַע ה' אֶת הַקּוֹל  
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Day of going to Press



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Day of going to Press



Stations	Title in full	Day of going to Press
Quetta	Baluchistan Gazette	Wednesdays and Saturdays
Quilon	Malayali	Wednesdays and Saturdays
Rajkot	Kathiawar Times	Wednesdays and Saturdays
Rangoon	Burma Sunday Times Rangoon Gazette Rangoon Times	Sundays Daily, except Mondays Daily, except Sundays
Ratnagiri	Bakool Satya Shodhak	Saturdays Sundays
Rawalpindi	Punjab Times Shubha Suchaka Prakash	Saturdays and Wednesdays Fridays Wednesdays
Sattara City	Hyderabad Bulletin	Daily
Secunderabad	Hyderabad Bulletin Notice Sheet	Daily
Shahjahanpur	Sarpunch Trade Advertiser (Waper Samachar)	Daily
Shikharpur (Sind)	Assam Advertiser	Saturdays
Shillong	Kaplataru	Fridays
Sholapur	Sholapur Samachar Associated Press Indian News Agency Indian War Cry News of India	Tuesdays 27th of each month Wednesdays
Simla	Pioneer Daily Bulletin Reuters Telegram Company, Limited	Week days
Subkur	Sindhi	Saturdays
Surat	Apakshapata Deshi Mitra Gujarati Mittra and Gujarati arpan	Saturdays Thursdays Saturdays
Sylhet	Paridarsaka Tamalka Isham Babi	Wednesdays Saturdays Fridays
Tangail	Arundodaya	Sundays
Tripura	Lokprakasham	Sundays
Trivallia	Kerala Taraka	Wednesdays
Trivandrum	Western Star	Tuesdays, Thursdays, and Saturdays
Vizagapatam	East Coast News and Advertiser	Weekly
Wai	Modavittia Vilttasar	Mondays Mondays
Yedmal	Harilashore	Sundays



# Societies : Literary, Scientific and Social.

tion of the different vertebrates and invertebrates found in the Indian Empire and Ceylon. A Journal is published quarterly which contains articles on different natural history subjects as well as descriptions of new species and local lists of different orders in the more recent numbers serial articles on game birds, common snakes, and common butterflies have been appearing. Annual subscription Rs 15 Entrance fee, Rs 10, *Honorary Secretary*, W S Millard, *Care of*, N B Kinnear, Office and Museum, 6, Apollo Street, Bombay.

BRITISH AND FOREIGN BIBLE SOCIETY—Since 1811 the British and Foreign Bible Society has been at work in this country. It has 6 Auxiliaries in India and an Agency in Burma. The first Auxiliary was established in Calcutta, in 1811, then followed the Bombay Auxiliary in 1813, the Madras Auxiliary in 1820, the North India Auxiliary in 1826, the Punjab Auxiliary in 1863, the Bangalore Auxiliary in 1875, while the Burma Agency was founded in 1899. The Bible or some portion of it is now to be had in 80 different Indian languages and dialects and the circulation throughout India has reached over 1,000,000 copies in 1913. The Bibles, Testaments, and Portions in the various Vernaculars are sold at rates which the very poorest can pay, and grants at considerable loss to the Society. Students of English Scriptures are made to pass the various University examinations, whose applications are countersigned by their Principals, as under—

The 4 Gospels and the Book of Acts in 1 Vol to Baccalulates  
The New Testament and Psalms to Intermediate, The Bible to Graduates

Last year no fewer than 8,000 volumes were so distributed. Portions of Scriptures in the important Vernaculars have been prepared in raised type for the use of the Blind and large grants of money are annually given to the different Missions, to enable them to carry on Bible-work and Female Education. Besides the British and Foreign Bible Society, there is Bible work carried on, in India, Assam and Burma in a much smaller way by the Bible Translation Society—which is connected with the Baptist Missionary Society—the American and Canadian Baptist Mission, the National Bible Society of Scotland, and the Tranquebar Tamil Bible Society.

The following table shows the growth in the British & Foreign Bible Society's work during the past few years in India & Burma—

CIRCULATION OF THE B F B S IN INDIA

Auxiliaries		Total copies of Scriptures			
1910	1911	1912	1913	1914	1915
123,899	138,907	151,128	161,720	178,720	184,753
138,907	151,128	161,720	178,720	184,753	191,809
250,273	266,915	268,688	280,552	280,552	280,552
22,309	32,958	33,630	53,946	53,946	53,946
148,681	186,911	212,011	186,050	186,050	186,050
71,842	91,416	108,646	117,225	117,225	117,225
756,911	921,843	1,059,926	1,094,330	1,094,330	1,094,330

Calcutta  
Bombay  
Madras  
Bangalore  
North India  
Punjab  
Burma

AGRICULTURAL AND HORTICULTURAL SOCIETY OF INDIA (Calcutta)—Founded 1820 Annual subscription Rs 32 Entrance fee Rs 8 *Secretary*, F H Abbott 17, Allpore Road, Allpore

AGRI-HORTICULTURAL SOCIETY OF BURMA—*Secretary*, Capt W H Allen, Victoria Park, Kandawagay

AGRI-HORTICULTURAL SOCIETY OF MADRAS—Established 1833 Quarterly subscription for members in Class A Rs 7, in Class B Rs 3 *Secretary*, P F Lyson, Mount Road, Tenampet, S. W, Madras

ANTHROPOLOGICAL SOCIETY OF BOMBAY—Founded 1886, to promote the prosecution of Anthropological research in India, to correspond with Anthropological Societies throughout the world, to hold monthly meetings for reading and discussing papers, and to publish a periodical journal containing the transactions of the Society. Annual subscription Rs 10 *Secretary*, R P Masani, M. A., Town Hall, Bombay

ASIRIO SOCIETY OF BENGAL (Calcutta)—*Secretary*, G H Typper, M. A., 57, Park Street, Calcutta

BOMBAY ART SOCIETY—Founded 1888, to promote and encourage Art by exhibitions of Pictures and Applied Arts, and to assist in the establishment and maintenance of a permanent gallery for Pictures and other works of Art. Annual exhibition every February. Annual subscription Rs 10, Life Member Rs 100 *Secretary*, Prof O V Muller, M. A., Elphinstone College, Bombay

BOMBAY BRANCH OF THE CLASSICAL ASSOCIATION—The Classical Association was started, in 1903 in London, to promote the development and maintain the well-being of classical studies. The Bombay Branch was founded in 1910, it numbers 137 members, holds 5 or 6 meetings a year, and publishes a yearly Journal. Subscription Rs 6 for ordinary and Rs 2-8-0 for associate members

BOHARAY BRANCH OF THE ROYAL ASIATIC SOCIETY—Founded 1804, to investigate and encourage Oriental Arts, Sciences and Literature. Annual subscription Rs 50 *Secretary*, Prof G Anderson Town Hall, Bombay

BOHARAY NATURAL HISTORY SOCIETY—Founded 1833, to promote the study of Natural History in all its branches. The Society has a membership of about 1700 and a small museum with a representative collection. A membership of about 1700 and a small museum with a representative collection.

These returns do not include the copies which any Auxiliary has supplied to London or to other Auxiliaries and agencies during the year



Poona which succeeded in making inocula-  
tion popular in the Deccan, the Salunbra  
Fire Relief Committee which arranged for  
the relief to sufferers for five years and by  
undertaking a scheme of non-official relief  
during the famines of 1907-08 and 1914 in the  
United Provinces, the famine in Gujarat and  
Kachhwar of 1911-12 and the famine of  
1913 in the district of Ahmednagar. (8)  
organising public opinion on the question of  
Indians in South Africa.  
(Quite recently the United Provinces Branch  
organised a band of volunteers who rendered  
assistance, in a manner that drew general  
approbation, to the pilgrims at the last  
Kumbha Mela in Harwar. The Society  
engages in journalistic work also, having in  
its control the *Hindu*, an English weekly  
in Nagpur, the *Dnyan Prakash*, a Marathi  
daily in Poona, and the *Hindustani*, an Urdu  
weekly in Lucknow.  
The expenses incurred by the Central Home  
of the Society in Poona and its four  
branches exceed Rs 40,000 a year and the  
amount is made up by contributions from  
Indians, rich as well as poor. The present  
number of workers enlisted by the Society  
is about 20 most of whom are University men  
of considerable standing.

SEVA SADAN—The Seva Sadan Society was  
started on the 11th of July, 1908, by the late  
Mr B M Malabari. It is the pioneer In-  
dian ladies' society for training Indian sisters  
in domestic and sewing (through them) the  
poor, the sick and the distressed. The society  
has a habitation in Gamdevi, Bombay. One-  
half of the Building and Endowment Fund  
of Rs 82,000 has been spent mainly in build-  
ing at Gamdevi and partly in the purchase  
of two acres of land at Santa Cruz for a  
"Sisters' Home" and other purposes.

The Society maintains the following institu-  
tions for training its probationers and for  
doing its other work. 1 A home for the  
Homeless. 2 An Industrial Home with  
various departments. 3 A Shelter for the  
distressed. 4 Dispensary for Women and  
Children. 5 Ashrama (or Sisterhoods). 6 Free  
educational classes and a Library and Rec-  
ding-room. 7 A Work-class, and Home-Classes  
for the benefit of women. The Society has  
three branches, one at Poona and another at  
Ahmedabad, and a third at Bangalore. The  
expenditure annually incurred is about  
Rs 20,000.  
A. A. B. B. A.  
English, M. A., LL.B., President, Mrs  
Khanabai Rande, President, Ahmedabad  
Branch, Lady Chinnubai Mahadaval, Presi-  
dent, Poona Branch, Mrs Rande, Presi-  
dent, Sister Sushilabai and the Hon'ble  
Mr Lalubhai Samaldas Trustees, Sir Narayan  
Chandavarkar, Sir Bhalechandra Kishan, Sir  
D. Thackersey, the Hon Mr G R Parshli  
and the Hon. Mr Lalubhai Samaldas, C.I.E.

CONSCIENTIERS' HOME SOCIETY—This So-  
ciety was started by the late Mr B M Malabari  
on the 1st of June 1909. It is re-  
gistered under Act No. XXI of 1860. It is an  
out-shoot of the Seva Sadan. Mr Malabari  
secured a large grant of land in a Himalay-  
an pine forest in Dharmapur (Simla Hills)  
from H. H. the Maharaja of Patiala, for a

Lesson Expositions are published in 20  
Vennucular. In addition, there is a large  
publication of literature dealing with all  
phases of child study and moral and reli-  
gious training. The monthly publication of  
the Union is the *India Sunday School Journal*.  
Two whole-time and twenty-four part-time  
missionaries are devoted to the work of Union.  
The Teachers Training Department is under  
the care of Mr E. A. Annet.  
General Secretary of the Union, the Rev J.  
Burgess, India Sunday School Union Office,  
Subbulpore.

MADRAS FINE ARTS SOCIETY—Secretary,  
Edgar Thurston, Central Museum, Madras.  
MADRAS LITERARY SOCIETY AND AUXILIARY  
OF THE ROYAL ASIATIC SOCIETY—Secretary,  
W. R. Graham, I.C.S., College Road, Numbur  
gambahum.

PHILATHELIC SOCIETY OF INDIA—Annual  
subscription Rs 20. Secretary, J. Godinho,  
Gligum, Bombay.

PHOTOGRAPHIC SOCIETY OF INDIA (Calcutta).  
—Annual subscription Rs 24 (Town Mem-  
bers) and Rs 10 (Mofussil members). En-  
franchise fee Rs 20 and Rs 10. Secretary,  
A. K. Taylor, 40, Chowringhee Road, Calcutta.

RAJGOON LITERARY SOCIETY—Secretary,  
M. Hunter, 13, York Road.  
RAJGOON METEOROLOGICAL AND DRAMATIC SOCIETY  
—Founded 1907. Secretary, Miss B. West,  
Dalhousie Street, Raigoon.

SERVANTS OF INDIA SOCIETY—The Servants  
of India Society which was founded by the  
late Hon'ble Mr Gopal Krishna Gokhale,  
C.I.E., in 1905 has its Head-quarters in  
Poona and its objects are "to train national  
missionaries for the service of India and to  
promote, by all constitutional means the  
true interests of the Indian people." Its  
government is vested in the first member  
or President and a Council. On the death  
of Mr Gokhale in February, 1915, the Hon'ble  
Mr V. S. Srinivasa Sastri was elected Presi-  
dent. It has at present four branches, viz.

(1) in Bombay, (2) in Madras, (3) in the United  
Provinces, (4) in Central Provinces. Each  
Branch consists of ordinary members, mem-  
bers under training and permanent assistants  
who work under the direction of a Senior Mem-  
ber. The branches engage both in propaga-  
ndist and active work of political, educational,  
social, agricultural and philanthropic charac-  
ter. A fair idea of the work of a branch can be  
had from a brief description of the operations  
of the Bombay Branch whose members have  
so far undertaken activities in various fields  
(1) Social purity like the Holiha Sammelan  
of Bombay, (2) Social reform organization  
under the auspices of the National Social  
Conference, (3) raising public opinion about  
elementary education, (4) promotion of the  
cause of elevation and education of Indian  
women by building up institutions like the  
Seva Sadan, Poona Branch, (5) Social Service  
League of Bombay, (6) spread of co-opera-  
tive movement among the agriculturists,  
compositors, and pullands, (7) relief work  
connected with wild spread calamities by  
organizing the Plague Relief Committee of





The Official Organ of the Association is "The Young Women of India" which has a circulation of over 2,000 copies monthly.

late Sir George Williams on June 6, 1844, seeks to unite those young men who, regarding Jesus Christ as their God and Saviour according to the Holy Scriptures, desire to be His disciples, in their doctrine and in their life, and to associate their efforts for the extension of His kingdom among young men. The above is known as the "Paris Basis" of the Young Men's Christian Associations and is world-wide. It was adopted at the first World's Convention in Paris in 1855 and re-affirmed at the Jubilee World's Convention in Paris in 1905. The aim of the Association is through its religious, educational, and physical work to cater for the threefold—spiritual, mental and physical—needs of young men, and its policy is one of intense loyalty to the Church.

There are, as a rule, two classes of members  
any young man who is a member in full  
communion of any Protestant Christian  
Church may be an active or young member  
and any young man of good character may  
be an associate

The Young Men's Christian Association, though relatively new to India, is spreading very rapidly. The local Associations are autonomous and governed by local Boards of Directors. These Associations, in convention select a National Council of European and Indian laymen, who are responsible for the supervision and expansion of all forms of the Association work. Both the National Council and the local Associations employ specially trained full time Secretaries. Over two-thirds of the Secretaries are supported from funds raised in India and Ceylon. The remaining Secretaries are supported by the Associations of North America, Australasia, and Great Britain, but their work is directed by committees in India, to whom their services are loaned for the time-being. The first paid Secretary came to India over twenty-five years ago, in response to an appeal from Madras. Soon afterwards the National Council was organised, and has become increasingly an indigenous institution. There are now 10 Associations with 11,200 members. Of these about one quarter are Europeans and three-quarters are Indians, of whom over half are non-Christians. The following Associations own one or more buildings which serve as the local headquarters — Allahabad, 2, Bangalore, 1, Aliphey, 1, Bombay, 4, Calcutta, 5, Calicut, 1, Colimbator, 1, Colombo, 1, Galle, 1, Hyde- rabad, 1, Jubulpore, 1, Karachi, 1, Lahore, 1, Madras, 1, Mandalay, 1, Maymyo, 1, Nagpur, 1, Nahr Tal, 1, Rangoon, 3, Sec- underabad, 1, Simla, 1, In addition to buildings owned by the As- sociation, bungalowers have been rented to serve as headquarters in the following sta- tions — Ahmednagar, 1, Allahabad, 1, Ban- glore, 2, Colombo, 2, Delhi, 1, Feroz- pore, 1, Hyderabad, 1, Jampur, 1, Jhansi, 1, Jubulpore, 1, Lahore, 2, Lucknow 1,

The departments of the National Council are Railway, Rural, Literary, Army, High School, Architectural and Physical. The Student Christian Association is affiliated to the National Council and has branches in more than two score Colleges. The Railway Department is responsible for the development of Associations amongst railway employees at Jamnagar the railway institute and at the princely Engineers-Club are operated by the Y. M. C. A. The Rural Department is organising village Y. M. C. A.'s and co-operative credit societies and promoting co-operation. The Literary Department maintains three Secretaries—J. N. Bhanu for Hinduism, K. J. Samdars for Buddhism and H. A. Walter for Mohammedanism. The object of the department is to promote a proper and sympathetic understanding of the non-Christian religions and show their relationship to Christianity. At the beginning of the war there were but three Army Associations and the Army Secretaries in villages are provided for British Troops in eighteen cantonments under the direction of thirty-six Secretaries and Assistants. Five Secretaries have been sent to organise Soldiers-Clubs in Mesopotamia, and thirty-eight Secretaries have been sent to serve the Indian Expeditionary Force A in Europe. In addition to organising Y. M. C. A.'s, school boys, the High School Department arranges for holiday camps for boys and high school teachers. The National Council employs its own architects who plan and construct its buildings, hostels, and playgrounds. The Physical Department specialises on physical education and is promoting the playground movement. The headquarters of the National Council is 86, College Street, Calcutta. The officers are—

Patron—His Excellency Lord Hasting or  
Rensselt, Viceroy and Governor-Gen-  
eral of India  
Chairman—Raj Sir Harnam Singh,  
K. O. B  
Treasurer—W R Gourlay, Esq, I c s,  
8, Government Place, Calcutta  
Joint Treasurer—L Robertson, Esq, I c s  
General Secretaries—E C Carter, A C  
Harte, K. T Paul  
The Bombay Association now possesses four  
well-equipped buildings—Woodhouse Road,  
Lamington Road, Rebseh Street, and Rey-  
olds Road The President is Sir D M  
Inglis, and the General Secretary is Mr T G  
G Chama In connection with each build-  
ing there is a well managed hostel, one for  
Anglo-Indian apprentices, one for Indian  
students, one primarily for European busi-  
ness men, and one for Indian Christians  
The Elton Hockey Tournament and the  
Condor Tennis Tournament are held annu-  
ally under the auspices of the Bombay As-  
sociation



## PRINCIPAL CLUBS IN INDIA.

Name of Club	Estab-lished	Club house	Subscription			Secretary
			Ent	An-nual	Mon-thly	

ABBOTTABAD	1890	Abbotabad, N W F Prov	16	Rs	Rs	Capt P M Rennie
ADYAR	1893	Madras	75	12	4	F Buckley
AGRA	1893	Agra Cantonment	50		7	Major G H C Williams, R G A
AMBEDKAR	1889		32		10	Major W Cortlandt
AMAL	1893	Lushai Hills, E B and Assam	32		10	Lt-Col G H Loch
AMJERE	1883	Kaiser Bagh	50		15	C Richardson
AROLA	1870	Berar	100		9	H C Greenfield
ALLAHABAD	1868	Allahabad	100		9	Capt G M Routh, R A
AVHATOTI	1894	Amritsar	20	12	7	A Mackay
BANGALORE UNITED SERVICE	1868	38, Residency Road	100		7	W J M Peeble
BAREILLY	1883	Municipal Gardens	32		9	Capt W F M. Longman
BARISAL	1864	Backerganj, Barisal	25		12	G H W Davies
BARNACKPOT	1850	Grant Trunk Road, 8, River Side	48		10	Major G D L Chat
BASSEIN	1881	Eytche Street, 50, Bas-sein, Burma	50		10	Comdr A Hamilton
BEGLAVY	1884	Close to Race Course	50		10	Lt Col J W Harley-Lyon
BEZARES	1827	33, Chowringhee Road, Calcutta	20	15	14	Wilnot C Dover
BENGAL UNITED SER-VICE	1845	29, Chowringhee Rd	150	18	10	C A MacKenzie
BOHRA	1862	Rampart Row	100		6	H G Michens
BOHRA	1885	Merchant Street, Ran-goon	50		6	F G Miller
BYCULLA	1833	Belasis Rd, Bombay	200	12	10	W P Pechey
CALCUTTA	1907	13, Russell Street	100		10	D Thindsay & Rajender Nath
CALCUTTA TURE	1861	49, Theatre Road	150	25	14	J Hutcheson
CHAMBA	1844	Cannapore	50	8	14	Major Lawrenson
CHITTAGONG	1878	Pioneer Hill, Chitta-gong	50		10	Comdr E R Hoops
CLUB OF CENTRAL INDIA	1885	Minow	50		8	Major Charles T Lammam
CLUB OF WESTERN INDIA	1865	Elphinstone Road, Poona	200		6	Major N Leshe
COCANADA	1876	Cocanada	50		5	Frederic A Cox,
COMBATORE	1867	Combatore	70		10	L H Deane
COONOR	1864	Coonor, Nilgiris	50	12	14	L W Stonely, C I L,
DACC	1864	Dacca	50		14	Capt E T Ingham,
DARJEELING	1868	Auckland Road	70		7	F M Trimmie
DELHI	1898	Ludlow Castle, Delhi	32		10	Lt-Col D M Da-
HIMALAYA	1841	Mussoorie	100	12	50	R S Wahab
JHANSI	1887	Next to Public Gar-dens, Jhansi	50		9-8	Major W Hallam, R A, M C,

# Principal Clubs in India

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Name of Club	Estab-lished	Club house	Subscription			Secretary
			Ent	An-nual	Mon-thly	
MADRAS	1831	Mount Road, Madras	Rs 250	Rs 92	Rs 10	Captain W B F Davidson
MALABAR	1564	Beach Road, Calcut	50	12	6	W O Wright
MADRAS	1901		100	12	10	
MOOLTAN	1892	Mooltan	30	12	5	Capt C B Penton
NAMI TAL	1864		100	12	5	Capt J O Nelson
OOTACAMUND	1840	Ootacamund, Nilgiri Hills	150	12	5	C A Mackenzie
OREENT		Chapaty, Bombay	150		6	Jeهانگر Dosabhoj Framjee, I S O, and A H A Simcox, I C S
PEGU	1871	Prome Rd., Rangoon	150	12	10	Capt I M Conway
PESHAWAR	1883	Peshawar	32		10	Poole
PUNJAB	1879	Upper Mall, Lahore	150		12	A. R. Ross Redding
QUETTA	1879	Quetta	60		15	Capt B Leicester
RANGOON BOAT CLUB	1874	Halpin Rd., Rangoon	75	6	7	W B Clover
RAJPUTANA	1880	Royal Lakes, Rangoon	48		3	R R Yeomans
ROYAL BOMBAY	1880	Mount Abu	50	48	8	Maj M P Corkery
SATURDAY	1880	Apollo Bunder	250	18	8	G C Plinston
SHILLONG	1883	2, Wood St, Calcutta	100		8	G Hervey
SHILLONG	1878	Secunderabad, Deccan	50		12	W C Clark
SHILLONG	1878	Northbrook Road, Shillong	50		12	C H Holder
SIALKOT	1371	Sialkot, Punjab	32		6	Capt G S Rivett
SIND	1371	Karachi	200	12	6	Carnac
TRICHINOPOLY	1869	Cantonment	50		4	C McC Conway
TUTICORIN	1885	Tuticorin	50		8	H S Northey
UNITED SERVICE CLUB	1861	Simla	200		8	Capt L R. Vauzhan, G L Dowbiggin
UPPER BOMBA	1589	Port Dufferin, Mandalay	50		8	E D Hatfield
WESTERN INDIA TRAF	1863	Bombay and Poona	50	20	9	Maj J E Hughes
WHEREVER		The Mall, Meerut	50		9	Duty Asst Secretary J Heynold, Captain H Watton

## The Church in India.

In the ordinary acceptance of the term, Protestantism is no established Church in India. An ecclesiastical establishment is maintained for large centres there exist schools of various grades as well as orphanages, for the education of Europeans and Anglo-Indians under the control of various Christian bodies. The Roman Catholic Church is notoriously distinguished by much activity and financial generosity in this respect. Her schools are to be found throughout the length and breadth of the Indian Empire, and they maintain a high standard of efficiency. The Anglican Church comes next, and the American Methodist have established some excellent schools in the larger hill-stations. The Presbyterians are also well-represented in this field, particularly by the admirable institution for destitute children at Kallimpong, near Darjeeling. Schools of all denominations receive liberal grants-in-aid from Government, and are regularly inspected by the Education Departments of the various provinces. Thanks to the free operation of the denominational principle and its frank recognition by Government, there is no "religious difficulty" in the schools of the European and Anglo-Indian communities.

### Christian Missions.

The tradition that St Thomas, the Apostle, was the first Christian missionary in India is by no means improvable. History, however, carries us no further back than the sixth century, when a community of Christians is known to have existed in Malabar. Since then the so-called Syrian Church in south-west India has had a continuous life. Except in its fanaticism this Church (or rather these Churches, for the Syrian Christians are now divided into four communities) has displayed little of the missionary spirit until quite recent times. Western Christianity was first introduced into India by the Portuguese, who established their hierarchy throughout their sphere of influence, Goa being the metropolitan seat of the Indies. Francis Xavier, a Spaniard by race, took full advantage of the Portuguese power in Western India to carry on his Christian propaganda. His almost super-human zeal was rewarded with much success, but many of the fruits of his labour were lost with the shrinkage of the Portuguese Empire. It is really to the work of the missionaries of the 17th century that Propaganda owes its large and powerful following in India to-day. The Roman Catholics in India number 1,901,006, of whom 379,251 were added during the decade 1901-1911. The total of "Syrian" Christians (exclusive of those who while using the Syrian liturgy, are of the Roman obedience) is 316,612, as against 218,741 in 1901. Protestant Christians (the term throughout this article includes Anglicans) number 1,686,731, an increase of 486,986 since 1901. Thus, the total number of Christians of all denominations in India is now close on four millions. In fact it probably exceeds that figure at the present moment, as these statistics are taken from the Census Report of 1911, and the rate of increase during the previous decade was nearly 100,000 per annum.

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The ecclesiastical establishment includes four denominations—Anglican, Scottish, Roman and Wesleyan. Of these, the first two enjoy a distinctive position, in that the Chaplains of those denominations (and in the case of the first-named the Bishops) are individually appointed by the Secretary of State and rank as gazetted officers of Government. Throughout the Indian Empire there are 134 Anglican and 18 Church of Scotland chaplains whose appointments have been confirmed. The authorities in India of the Roman Catholic receive block-grants from Government for the provision of clergy to minister to troops and others belonging to their respective denominations. The Wesleyan Methodist Church has a staff of military chaplains in India who receive a fixed salary from Government and 25 chaplains working on a capitulation basis of payment by Government Churches of all four denominations may be built, furnished and repaired, wholly or partly at Government expense.

In the Anglican Communion a movement towards Synodical Government was making great progress. When, in the course of the year 1914, serious legal difficulties were encountered The Bishops were advised that their relations with Canterbury and the Crown precluded the establishment of synods on the basis adopted by the Anglican Church in America, Japan, South Africa and other countries where it is not established by the State. It is stated that in course of time those relations may be modified so as to admit of the establishment of synodical government in India. Meanwhile Diocesan Councils are being adopted as a make-shift measure. These Councils possess synodical characteristics, but are devoid of any coercive power. So far as the European and Anglo-Indian communities are concerned the activities of the Church are not confined to public worship and pastoral functions. The education of the children of those communities is very largely in the hands of the Christian denominations. There are a few Jewish institutions such as the

The Protestant Churches made no serious attempt to evangelize India till the beginning

stimulus was also given to medical missions Hospitals and dispensaries have sprung up in all parts of the mission field, and leper asylums effort in 1911 the total number of medical missionaries working under Protestant societies in India was 118 men and 217 women the majority of the former being also ordained ministers of religion. There are 184 industrial institutions in which 59 different arts and crafts are taught, ranging from agriculture to type-writing. In this department the Sāṭva-dhāra Army hold a prominent place, and the confidence of Government in their methods has been shown by their being officially entrusted with the difficult work of winning over certain criminal tribes to a life of industry. The indirect effect of all this philanthropic activity under missionary auspices has been most marked. It has awakened the social conscience of the non-Christian public, and such movements as "The Servants of India" and the mission to the Depressed Classes are merely the outward and visible sign of a great stirring of the philanthropic spirit far beyond the sphere of Christian missionary operations

## Anglican Missionary Societies.

The Church Missionary Society carries on work in India in seven different missions—the United Provinces, South India, Travancore and Cochin, Bengal, Western India, Punjab and Sind and the Central Provinces and Rajputana. The names are in order of seniority. Work was begun in what are now called the United Provinces in 1813, in the Punjab in 1851, and in the Central Provinces in 1854. The Society has always kept Evangelistic work well to the fore, but it also has important medical missions, especially on the N-W Frontier, and many schools of the Primary, Middle and High standards. The Church of England and Zenana Missionary Society is an offshoot of the C M S controlling the work of 162 missionary ladies. The number of ordained European missionaries of the C M S in India is 166, European laymen 64 and European lay women 271. The Society, whom 52,000 are adult communicants

The propagation of the Christian faith in the State of Madras is chiefly interested in the excellent moral effect produced by these institutions amongst the educated classes, and the higher educational ideals maintained by their staffs. The principal universities colleges under Protestant auspices are the Madras Christian College, the Duff College, Calcutta, the Wilson College, Bombay, and the Foreman College, Lahore all these are maintained by Presbyterian societies, either British or American. The Roman Catholics have a large number of educational institutions, ranging from small village schools to great colleges preparing students for University degrees. But the proportion of Christian students in their institutions is very much larger than in those of the Protestant bodies. The proportion of literates amongst native Roman Catholics is probably lower than amongst the Protestant converts, but compared with Hindus and Mohammedans it is conspicuously higher. The Roman Catholics have some 3,000 elementary schools in which 68,000 boys and 41,000 girls are receiving instruction. In middle and high schools they have 143,000 boys and 73,000 girls and in University colleges about 5,000 students of both sexes. These figures, however, include a large proportion of Europeans and Christians, who are an almost negligible quantity in Protestant mission schools and colleges.

More recent, but producing even wider spread results, is the philanthropic work of Christian missions. Before the great famine of 1873, missionaries confined themselves almost exclusively to evangelistic and educational activity. The famine threw crowds of destitute people and orphan children upon their hands. Orphanages and industrial schools became an urgent necessity. But the philanthropic spirit is never satisfied with one kind of organization or method. A great

**Society for the propagation of the Gospel**  
Statistics of the work of this Society are not easily ascertained, as much of it is done through Diocesan institutions, which, while financed and in many cases manned by the S P G, are entirely controlled by the Diocesan authorities. The best known of the S P G missions is that at Delhi, commonly called the Cambridge Mission to Delhi, carrying on educational work at St Stephens College and School. At the College there are about 200 students under instruction, and at the High School 860. The College houses accommodate 100 students. Missions to the depressed classes exist in Burma, in the Ahmednagar District and in several parts of South India, especially in the Diocese of Tinnevely-Madras. There are 1,16,000 Indian Christians under the aegis of the S P G, 90 ordained European missionaries and 93 European lady workers. Other Anglican Societies—The Oxford Mission to Calcutta was started in 1850.

**Bengal Ecclesiastical Department.**  
 Telroy, Most Reverend George Alfred, D D  
 Lord Bishop of Calcutta and Metropolitan

**Bengal Ecclesiastical Department.**

Leftroy, Most Reverend George Alfred, D D  
of India  
Lord Bishop of Calcutta and Metropolitan  
of India  
SENIOR CHAPLAINS  
Stoloe, Rev Cecil George, M A  
Firminger, Venble Walter Kelly, M A, B D  
Scott, Rev Sydney, S, M A  
Stuart, Rev Robert William Hall, B A  
Smith, Rev Joseph Frank, B A, A K C  
Keeling, Rev Ernest William Phillips, B A  
Dunbridge, Rev W H, M A  
And 11 Junior Chaplains  
Services transferred to Bihar and Orissa

**Bombay Ecclesiastical Department.**

<p>CHAPLAINS OF THE CHURCH OF SCOTLAND</p> <p>Thomson, Rev William, M A</p> <p>Gillan, Rev D H</p> <p>McCaul, Rev M W, B A</p>	<p>CHAPLAINS OF THE CHURCH OF ROME</p> <p>Probationary Chaplain, St Andrew's, Calcutta</p> <p>Official Chaplain, St Andrew's, Calcutta</p> <p>On combined leave</p>	<p>CHAPLAIN, PRESIDENCY SENIOR CHAPLAIN, ST ANDREW'S,</p>
<p>CHAPLAIN, PRESIDENCY JAIL</p>	<p>Archbishop</p>	<p>Carbery, Rev Fr Stanislaus, S J</p>
<p>Bombay Ecclesiastical Department.</p>	<p>Lord Bishop of Bombay</p> <p>Archdeacon of Bombay and Bishop's Commissary</p> <p>Registrar of the Diocese</p>	<p>Palmer, Right Reverend Edwin James, M A</p> <p>Bartram, Rev C M, M A (on leave for 3 months from December)</p> <p>Bowen, John Cutburt Grenside</p> <p>Kennelly, Rev W J M, M.A.</p> <p>Coles, Rev A H</p> <p>Heywood, Rev R S</p> <p>Josh, Rev D L</p> <p>King, Rev C</p> <p>Milvington, Rev C S</p>
<p>Honorary Canons of Bombay Cathedral</p>		

Madræs Ecclesiastical Department.

Courtice, Rev. George Robert Aulton, M A, B S C  
 Footie, Rev. Harold  
 D'Alesio, Rev. Edward Samuel John, B A  
 deCoetlogon, Rev. Charles Evelyn Cambridge, M A  
 Mould, Rev. Horace  
 And 17 Junior Chaplains  
 CHAPLAINS OF THE CHURCH OF SCOTLAND  
 Matthew, Rev. John Crombie, M A, B D  
 And 3 Junior Chaplains  
 CHAPLAINS OF THE CHURCH OF ROME  
 Jurgens, The Very Rev. H  
 Madras Ecclesiastical Department.  
 Lord Bishop of Madras  
 Archdeacon and Commissary and Domestic  
 Chaplain to the Lord Bishop  
 Registrar of the Diocese and Secretary  
 to the Lord Bishop



## SENIOR CHAPLAINS

Brey, Rev. Christopher Francis, M.A.

Hall, Rev. Edmund

Lille, Rev. Edmund Douglas, M.A.

Wilhelm, Rev. Richard Herbert, M.A.

Ryan, Rev. John Hamilton

Hatchell, Rev. Christopher Frederic Wellesley, M.A.

Heycock, Rev. Francis Wheaton, M.A.

And 24 Junior Chaplains

CHURCH OF SCOTLAND

Iferton, Rev. John, M.A., B.D.

Weldrum, Rev. Neil, M.A., B.D.

Phillips, Rev. James Gibson

Mitchell, Rev. James Donald, M.A., B.D.

## Assam Ecclesiastical Department.

Coomes, Rev. A.W.P., B.A.

Kendrick, Rev. G.I.

McLennan, Rev. W.D., B.A.

## Bihar and Orissa Ecclesiastical Department

JUNIOR CHAPLAINS

Prawinder, Rev. William Hamilton, M.A.

Lalier, Rev. Henry

Larion, Canon Arthur Daniel

Payne, Rev. Russell, M.A.

Coagrove, Canon W.T.

Moore, Rev. H.W.

Tyoomer, Rev. Harold

Services placed at the disposal of the Government of India, Army, Dept.

## Burma Ecclesiastical Department

Ryder, The Right Reverend Rolleston Sterrett, M.A.

Cory, Venble Charles Page, M.A.

SENIOR CHAPLAINS

Blanford, Rev. Henry Weare, B.A.

Collins, Rev. James Henry

Sealey, Rev. George Henry

Ellaby, Rev. George Alfred, B.A.

And 7 Junior Chaplains

## Central Provinces Ecclesiastical Department.

Chatterton, Right Reverend E., D.D.

Price, Venble C., M.A.

SENIOR CHAPLAINS

Darling, Rev. G.W., M.A.

Anstey, Rev. H.C.S., M.A.

Clarke, Rev. W.L., M.A.

On combined leave

And 14 Junior Chaplains

## North-West Frontier Ecclesiastical Department

SENIOR CHAPLAIN

Campbell, Rev. R.W., B.A.

And 4 Junior Chaplains

## Punjab Ecclesiastical Department.

Purman, Right Reverend H.B., M.A., D.D.

Warlow, The Venble Edmund John, M.A.

Hassan Ullah, The Venble

SENIOR CHAPLAINS

Nalab, Rev. Henry

Becker, Rev. Charles Maxwell, M.A.

Syme, Rev. James Greenhill Skottowe, M.A.

Brookes, Rev. Joshua Alfred Rowland, M.A.

Stanley, Rev. Albert Edward, M.A.

Munro, Rev. Walter, M.A.

Stewart, Rev. Charles, B.A.

And 19 Junior Chaplains

Hendrad (Sind)

Chaplains

Eastern Himalayan district, and there is a ed at Howrah in the district of the mills, and Christian community there of over six thousand In the five mission districts of engineers and other workers in the mills

The Mission work of the Church is extended and varied. It is carried on in six centres—on Bengal, in Santalpala, with five stations, in Western India, including Bombay, Bombay district, Poona, and Jalna and Kethel in the Nizam's Dominions, in Madras, with four stations, in the Central Provinces, including Nagpur, Nagpur district, Bhandara, Wardha and Amritoi, and in Rajasthan, where similar three hospitals and six dispensaries.

The Church of Scotland has also done much to provide education for European children in India. Together with the United Free Church of Andrew's Church provides the governing body of the Bombay Scottish High School, which have always held a high place among such institutions, and exercised pastoral supervision over the Bombay Scottish Orphanage. In Bangalore there is the St Andrew's High School, and both in Bangalore and in Madras the local congregation supports a school for poor children. The now well-known St Andrew's Colonial Homes at Kilburn, though not directly part of the work of the Church of Scotland were initiated by and are being largely managed by Christian series of that Church. The homes are given the benefit of the donated European in connection and in domestic management work. There are now fifteen cottages, and 257 children in residence.

**BAPTIST**

**BAPTIST**

## SOCIETIES.

There are at work in these centres 215 Scotch missionaries together with a native staff of 430. Of organized Indian congregations there are 38 comprising 4521 communicant members, and representing a Christian community of 12,450. Of schools there are 324 with 756 teachers and 13,860 scholars. A large part of this work is organized and supported by the women of the Church who have sent out as many as 84 of their missionaries. In connection with this kind of work of the mission there are 19 hospitals where in the year 1893 100 patients and 450 in patients are treated, all of whom are brought under Christian instruction. There are four great missionary Colleges. There is the Medical Mission College with 700 students, which is rich in its great success under the wise leadership of the Rev. Dr. William Miller, and which is now contributed to by five other Missionary Societies as well as that of the Western Missionary Society, sit upon the college board. There is the Scotch Christian College in Calcutta with over 1000 students, and the Mission College at Daeput with 327 students, and the Wilson College in Bombay with 791 students.

## SOCIETIES.

by His Danish Majesty in 1827, and confirmed by the British Government in the Treaty of 1845, and placed in 1856 by the College Council at the disposal of the Baptist Missionary Society to become a part of its Theological. It was inaugurated in 1857 to the newly-formed Calcutta University, recognised in 1910 on the lines of its original Foundation with the appointment of a qualified Theological Staff on an Interdenominational basis for the granting of Theological Degrees to qualified students of all Churches

As the only College in India granting a Theological Degree a large number of students are now resident in the splendid College Buildings in Vt., the College prepares for the Calcutta Arts Examinations

Howells, M. A., B. D., LL. B., LL. D.

A Vicarage Theological Institute, and High School abutting on to the town, are also at Dilli and Cuttack, for the training of native preachers

There are 9 or 10 purely English Baptist Churches connected with the Society, but English services are carried on in many of the

AMERICAN BAPTIST FOREIGN MISSION SOCIETY, organized in 1814, has Missions in Burma, Assam 1836, Bengal and Orissa 1836, South India 1840. It owes its rise to the liberated Adamam Judson. Until 1910 the Society was known as the American Baptist Missionary Union. There are 31 main stations, Burma 14 in Assam, 9 in Bengal and Orissa, 8 in South India, besides hundreds of out-stations. All forms of missionary enterprise within the scope of the Society.

The missionary staff numbers 195 in all, 115 in Indian workers' staff of 4,954, 80 missionaries number 147,676. Organised churches number 1,110, of which 860 are self-supporting. Educational work is conducted on a large scale, the total number of schools all grades being 1,848 with over 58,000 pupils. The Christian College has 68 students. There are 8 High Schools with 3,162 pupils.

Medical work embraces 12 Hospitals and Dispensaries. During 1913 the number of patients treated was 60,075, and in patients 784.

The great work of the Mission continues to be theological and the training of the native teachers and Bible-women, and extends to many races and languages, the most important which, in Burma, has been the practical transmission of the Barmans, whose language has been reduced to writing by the Mission. Large efforts are made among the Indians on the tea plantations. The Mission at Kangoon is said to be the largest and richest in Burma. The American Baptist, English Mission and the American Baptist, Oriental Orissa Mission are branches of the

Lissam, Secretary, Rev. J. J. Tittle, Gaithersburg, Maryland

South India (or Agency) Secretary, Arcot  
 Station, D D Kurnool, Kurnool District,  
 S India  
 The TASAVANA BAPTIST Mission—With  
 missionaries, is established at Siragunge,  
 I Bengal

House, Singapore  
Secretary, Rev L T Thompson, Mission  
The Australasian Board of Baptist I of Eric  
Missions—Elucidating the social responsi-  
ing the Baptists of the various repre-  
Commonwealth. The field of operations is in  
I at London. The staff numbers 6 in Britain  
(Christian community of 7,870  
women). About 1,400 communities and 1

The Slater Baptist Mission—Has 10  
 missionaries, and 86 Indian workers in Madras.  
 We and the Trichy District Communitas,  
 number 120, organized Churches & Elementary  
 schools 27, with 1,200 pupils  
 Secretary, Rev E A Booth, Madras,  
 1885.

Medical work connected with the Society reported 2 Hospitals, 7 Dispensaries, 401 in-patients, and 73,645 out-patients for the year 1912. Two large Printing Presses for the year 1912 and 200,000 copies of English and Bengali work are conducted at Calcutta and Dacca.

Women's Missionary Association, B. M. S.—  
 Daxonds, there are 75 missionaries, 336 Indian  
 workers, 102 girls' Day Schools and 5 girls'  
 boarding schools in connection with this work,  
 751 villages are visited annually by teachers and  
 missionaries engaged in Gospel work. A large  
 place is given to medical work, 5 Hospitals  
 with qualified staffs and 12 Dispensaries pro-  
 viding for 1,004 in-patients, and 93,874 out-  
 patients for the past year. The Indian General  
 Secretary of the Women's Missionary Association  
 or the Baptist Missionary Society is Miss Angus,  
 44, Lower Circular Road, Calcutta.

THE (KABAR) BAPTIST MISSION—Was commenced in 1870, and is located in the Last-mentioned District to the north of Mabar, in the Bama Godwin, village, and Gaung District. There are 22 stations and 162 out-stations with a staff of 85 missionaries, including 5 baptized laymen, and 567 village workers, with Gospel preaching in villages. Organi- zed (Church) number 44, communicants 9,482, and adherents 15,809 for the past year. Nine Churches are entirely self-supporting. In the Educational department are 226 village Day schools, with 6,002 children, 8 Boarding schools, 2 High schools, a Normal Training school, a theological seminary providing in all for 991 pupils, and an industrial school. There are 5 Hospitals and two dispensaries. The Mission publishes a village newspaper Village Evangelist- tion is the great readership of the Mission, and extends its aid upon the work amongst women and children in particular. During the last decade membership has increased by 71 per cent, the Christian Community by 90 per cent, and the school by 270 per cent. The Indian Secretary is the Rev. A. A. Scott, Junr, Godavari District.

THE AMERICAN BAPTIST FOREIGN MISSIONS  
—Was commenced in the year 1836, and covers  
large parts of N. York, Gen. Wm. K. K. and  
Knox County Districts, and parts of the Decatur  
Its main work is evangelism, but there is large  
Educational and Medical work in addition.  
There is an English Church in Madison, a  
large industrial establishment, and the charge is carried  
on at Kani and the charge or one of the  
missionaries Organized Thirteen Churches, num-  
ber 133, with 66,520 baptized communicants  
There has been a net increase of 1,000 per annum  
for the past twenty years. There are 126  
Missionaries and 1,671 Indian Workers. There  
is a large Theological Seminary at Kaniupitum  
for the training of Indian preachers, and a Bible  
school at Kaniupitum for training Bible Women  
26 Boarding schools and 4 Miss. Schools give  
5 Hospitals report 1,501 in-patients and 19,583  
out patients for the year

*Corresponding Secretary,  
Prof. I. L. Martin,  
Albany, Genesee District.*

**AMERICAN BAPTIST, BENGAL-ORISSA MISSION** commenced in 1836 Area of operation, Midnapore and Balasore districts of Lower Bengal Mission staff 29, Indian workers 264 One English Church and 24 Vernacular Churches, Christian Community 5,000 One hospital and two dispensaries Educational One Theological and

## PRESBYTERIAN SOCIETIES.

The Hospital at Mirat, under the care of Dr W J Wainless and Dr C E. Vall is well known throughout the whole of S W India, and the Forman Christian College at Lahore under the principalship of Rev J C R Ewing, D D, C L E, is equally well-known and valued in the Punjab The Allahabad Christian College (Dr C A R Danner, Principal) is growing rapidly and its mechanical and agricultural departments have become increasingly prominent Woodsstock College for Women at Almorat, Pryncipal Miss A Mitchell, M D, is one of the largest and most valuable institutions of this description in Northern India Secretary of Council of A P Missions in India Rev H D Griswold, Ph D, D D, Saharanpur Secretary, Punjab Mission Rev E D Lucas, Lahore Secretary, North India Mission Rev R C Smith, Ranchpur, Hawn Secretary, Western Indian Mission Rev H G Howard, Kodoli, S M C

**THE IRISH PRESBYTERIAN CHURCH MISSION** operates in Gujarat and Kathiawar with a staff of 37 missionaries of whom 4 are qualified doctors and an Indian staff of 560 including school teachers There are 25 Organized Churches a communicant roll of 1,559, and a Christian community of 5,772 In Medical work there are 2 Hospitals, 5 Dispensaries, with 1,011 in-patients and 22,171 out-patients The Mission conducts 134 vernacular schools affording tuition for 6,351 pupils, 5 Orphanages, 4 Lecher's Training College for men, a Teacher's Training College for women, both at Ahmedabad, and a Mission Press at Surat The Mission has made a specialty of farming in the Panch Alahals and Rewa Kantha districts, with farm colonies attached Secretary Rev R R Johnson, B A, Mission House, Ahmedabad

**THE UNITED PRESBYTERIAN CHURCH OF N AFRICA**—Ghazal Mission was established in 1866 operating in the extreme North of the Punjab, and is practically the only Mission working amongst the 9,374 tribes and villages of that district Its missionaries number 78 Indian workers 718 There are 60 organized congregations with 499 outstations, a membership of 32,007, and a Christian community of 61,064 Women's Societies number 29 A theological seminary and a college & high schools, 7 middle schools, 2 industrial schools, 2,220 primary schools, contributing in all 12,315 pupils In medical work there are 4 hospitals and 7 dispensaries with 1,026 in-patients and 65,476 out-patients for 1914 Secretary Rev R Maxwell, Gujranwala

**THE AMERICAN PRESBYTERIAN MISSION** operates in 3 main sections known as the Punjab American and Western India Missions The American Staff numbers 191 and Indian Staff 1,508 There are 29 main stations and 149 out stations Organized churches number 53, 11 of whom are self-supporting There are 7,757 communicants and a total baptized community of 46,321 Educational work as follows: Christian Colleges, students 1,033, Theological Institutions, students 10 High Schools, pupils 1,023 Industrial Schools, 6 Teacher's Departments, 35 Medical Students at Mirat, 109 Elementary Schools, 190 schools of all ranks, pupils 13,224 M D, C L E Work 2 Hospitals, 12 Dispensaries, 4,743 in-patients, 18,008 out-patients Sunday Schools 400, with 12,227 Sunday School pupils Contributions for church and evangelistic work on the part of the Indian Church, Rs 18,820 Total Indian contributions for all purposes, including educational and Medical Rs 4,25,814

**THE GERMAN EVANGELICAL SYNOD OF NORTH AMERICA**—Commenced work in the O P India in 1865 The mission staff numbers 23, Indian Christian workers 310, Communicants 1,815 total Christian community 4,008, Organized Churches 6, one High School with 90 students and 64 other schools with 3,956 students The mission has 2 Hospitals and 6 Dispensaries which in 1914 treated 18,013 patients Secretary Rev F A Goetsch, Bismaripur

**THE WELSH CALVIST METHODIST MISSION (OR WELSH PRESBYTERIAN MISSION)** established in 1840 with a staff of 37 missionaries, 511 Native workers, occupies stations in Assam in the Khasia and Jaintia Hills the Lushai Hills and at Sylhet and Cachar The Khasia language has been reduced to writing, the Bible translated, and many books published

The main center of the Indian population in the Northwest is located in the town of Alameda, where the population is now 2,500. The town is situated on the banks of the Colorado River, and is the center of the Indian trade. The population of the town is composed of Indians, Mexicans, and Americans. The Indians are the majority of the population, and they are engaged in various occupations, such as agriculture, stock raising, and handicrafts. The Mexicans are engaged in commerce and industry, and the Americans are engaged in government service and education. The town is a important center of the Indian population, and it is the main point of contact between the Indians and the outside world.

# ALL-INDIA MISSIONS.

Hospital and Leprosy Asylum. Special efforts are made amongst the Nama Sudras and the aboriginal tribes known as the Jajjwars, Cheros and Pankas. The S India district is divided into 12 stations and 472 outstations. At Nagore, (Tirunore) is the Scott Memorial College with 983 students, a Church and congregation of 5 India Secretary Rev I H Brown, B.A., B.D., Cultivator. 5 India Secretary Rev I P Rice, B.A., Bangalore.

**THE CHRISTIAN AND MISSIONARY ALLIANCE**—Dates from the year 1893 under the name of the India Missionary Alliance, but a number of its missionaries were at work in Berar Province much earlier. The work is confined to the provinces of Berar, Khandesh and Gujarat. There is a staff of 72 missionaries and 75 Indian workers. The number of Mission stations is 20, with additional outstations. There are 4 orphanages, 2 for boys and 2 for girls. 3 training schools for Indian workers, and 1 English congregation at Bhusawal. Secretary Rev E R Carter, Khamgaon, Berar.

**THE CHURCH OF THE BRETHREN (AMERICAN)**—Opened work in 1895, and operates in the Southern part of Gujarat, Khandesh, and Thana Districts. Its staff numbers 29 including missionaries' wives, and 105 Indian workers. The baptised membership stands at 1,125, education is carried on in 2 Girls' Boarding schools, 4 Boarding schools for boys, and 81 Village Day schools. Industrial work is connected with four of the schools, and a Farm Colony is established at Lmballa.

**THE POONA AND INDIA VILLAGE MISSION**—Founded in 1893 operates in the Poona, Satara and Sholapur Districts, with 23 European and 32 Indian workers. The number of Indian Christians is 40. The main work is evangelism in the villages, with Women's Zealua work, and Village schools. There are 4 Village Dispensaries, including a large medical work in the great pilgrim-age city of Pandharpur, and a hospital at the headquarters of the Mission, Nasrur, in the Bhoe State. Secretary Mr J W Stothard, Nasrur, Poona District.

**THE AMERICAN CHURCHES OF GOD MISSION**—Has two missionaries at Bogra, Bengal. The INDIA CHRISTIAN MISSION—Founded in 1893, has 31 Organized Churches, 11 Missionaries, 38 Village stations, 1,076 Communicants, and 28 Primary schools in the Dhore district. S India Stations also in Berenaga, Khamgaon, S India, and Xuwara Ehy, Ceylon. Secretary A S Pwyter, Xuwara Ehy, Ceylon.

There are 3 PENTECOSTAL MISSIONS at work. The Pentecostal Mission in W Khamgaon and Thana Districts, the Pentecostal Church of the Nazarene Mission at Buldana, Berar, and the Pentecost Bands of the World Mission with a Boys' Orphanage at Boudi. Leheri C P and a Girls' Orphanage at Rajpandharpur, headquarters.

**THE INDIAN EVANGELISTIC MISSION**—Is engaged mainly with orphan children and is numbered about 120 Christians in all stations. It is principal of which is Dehra Dun. Director Professor J C Law on Dehra Dun.

**THE SAVITR AND JOHAGHAT DISTRICT BIBLE AND MEDICAL MISSIONS**—Was established at Lohaghat, 48 miles from Almorat, in 1910 amongst the rich missions are the Vanguard Mission at Sanjan, Thana District, with 6 Missionaries, and the Church of God Mission with 7 Missionaries at Lahore. The Burning Bush Mission has a staff of 8 Missionaries at Allahabad. The Tehri Border Village Mission is the only Christian enterprise in the Himalay in Native State of that name, its agents are stationed at Landour, and have translated portions of the New Testament into the Tehri-Garhwali language.

**THE HERPZABAH FAITH MISSIONARY ASSOCIATION** has six missionaries. Agent D W Zoep, Adra, B.N.R.

**THE LIBERTY MISSION**—Has 5 Missionaries with headquarters at Darjeeling, and Tibet as its objective. Secretary Miss J Fernson, Darjeeling.

**THE INDIA MISSIONARY SOCIETY OF THREE TELLY (DORAKAT MISSION)**—Opened in 1904, operates in the Warangal District of the Nizam's Dominions. It is the missionary effort of the Tamil Christians of Tinnevely. There are now 1,550 Christians in 46 villages. Secretary Mr J Anbudanum, B.N.R., Palamcottah.

**THE MISSION TO LEOPERS**—Founded in 1874, is an interdenominational and international society for the establishment and maintenance of Asylums for Lepers and Homes for their untainted children, working largely in India, China, and Japan. Its work in India is carried on through co-operation with 29 Missionary Societies. The Mission now has 40 Asylums of its own with over 3,500 inmates, and is aiding or has some connection with work for lepers at 20 other places in India. In the Mission's own and aided Asylums there are about 3,100 Christians. The total number of lepers reached by the Mission in India is about 5,000.

An important feature of the work of the Mission is the segregation of the untainted or healthy children of lepers from their diseased parents. 300 children are thus being segregated and saved from becoming lepers. The Mission very largely relies on voluntary contribution for its support. *Patrons.* The Dowager Dukes of Dufferin and Ava. *President.* The Prince of Ireland. Head Office, 28, North Bridge, Edinburgh. Mr W. J. Leheri, General Superintendent. Organizing Secretary, Mr John Luckon, F.R.S., 39, Henrietta Street, Covent Garden, London. Secretary for India Mr W. H. P. Anderson, Dehra Dun.

**THE REGIONS KEYD MISSIONARY UNION**—An interdenominational Society commenced work at Mohabari, Dehar, in 1900, and now occupies 4 stations and 7 outstations in the Champarn and Saran Districts, with a staff

of 13 Europeans, and 34 Indian workers. There are 21 elementary schools, with 617 pupils, a Girls' and a Boys' Orphanage and a Boarding school, communicants number 50 and 56 schools were 3,369 pupils, while 174 women were under training as teachers. The average side of the work is largely done by house-to-house visitation and teaching the women in

IXDIA—Established 1905, it has a staff of 21 Indian Missionaries, operates in Karwar, Chikmagalur and Omnar (Madras) Com. Sion has removed its headquarters to Lahore leaving only one Hon'y Missionary in Ludhiana who has charge of the Branch Dispensary at Gill and there is one Bible woman working in the city of Ludhiana. Four missionaries are in Lahore and work is being carried on in the Lahore District in connection with the Presbyterian Mission.

The Missionary Settlement for University Women was founded in Bombay in 1885 to reach the higher class of Indian ladies; its activities now include a hostel for women students, in addition to educational social, and evangelistic work. *Secretary*, Miss Dobson, Girgaum.

MISSION staff numbers 20, Indian workers 60, Church members 530, 1 Industrial Training Institution, 1 High School, 1 Bible School, 2 Orphanages, 1 Widow, Home, 1 Lepet, 14 High School, 8 Dispensaries, 1 Hospital, 1 Superintendent, 1 M C Camp, 10 Dharmas, 1 P The VEKOVITE Mission, GENERAL (over 1000) in the surrounding Kachegoon, Dooda District

**Disciple Societies**

The India Division of the Disciples of Christ (Foreign Christian Missionary Society of Cincinnati, Ohio, and Christian Women's Board of Missions of India combined) commenced work in 1882, its area Central and United Provinces, number of Indian Churches 14 and members 70. Its staff, including missionaries, wives, 67 Assistant missionaries, 3 Boarding Indian pupils, are 7 Hospitals, 17 Dispensaries with 50,118 in-patients and out-patients for the past year.

THE COTTO AND TEXTILE GENERAL MISSION— Established 1894, occupies sections in India in the Coimbatore and Anantapur Districts. 10,000 Indian workers, 50 Churches Mission staff, 23, Indian workers, 256 and Christians taken at Damoh. There are 8 Middle schools and 41 Primary schools with 3120 scholars. An active zenana work is carried on.

THE AUSTRIAN BRANCH has three Mission stations in Poona District. The first at Barli and Indl and branch has two mission stations, one in Mirzapur District, P. and one in Patna District. The Indian Mission on the District, Rev W. B. Winkler, D. D., Damoh, C. P.

[illegible]

Hospital with a general dispensary connected with the Mission, in addition to a self-supporting weaving community at Itarsi, and Industrial Works and a Farm Colony at Hosangabad *Secretary*, Mr Henry I Robson, Sohagpur, C P.

The American Friends' Mission with 5 Missions is working at Nowgong, *Secretary*, Miss D Ristler, Nowgong, C I.

The Old Church Hebrew Mission was established in 1838, in Calcutta, and is said to be the only Hebrew Christian Agency in India *Secretary*, J W Pringle, Esq, Calcutta.

THE OPEN BRETHRENS—Occupy 46 stations in the U Provinces, Bengal S Mlatra, Goda vern Delta Kanarese, Tinnevely, Malabar Coast, Combarore and Nilgiri Districts They hold an annual Conference at Bangalore

**Lutheran Societies**

(Several of the German Missions mentioned below have suspended or curtailed their work)

The American Evangelical Lutheran Mission General Council, founded in 1844 for the Goda-vern and Kistna Districts, has its Headquarters at Rajamundry. Its staff consists of 27, including Missionaries wives and Lady Doctors, with 2,620 There are Boys' and Girls' Central Schools, Mission Press, a well-equipped hospital and Book Depot at Rajamundry, and a High School at Peddapur *Chieftain*, The Rev C F Kuder, M A, Rajahmundry.

The 'General Synod' Section of the above, has its headquarters in Guntur founded in 1842. Its Christian community numbers 16,242 communicants, 27 missionaries, showing an increase of 61 per cent during the past ten years. The following institutions are connected with the Mission, a second grade College, High school for girls, Training School, and Industrial School *Secretary*, the Rev Victor McCauley, Guntur.

THE EVANGELICAL NATIONAL MISSIONS SOCIETY OF SWEDEN, founded in 1856, occupies the districts of Belli, Chindawara and Sangor in the Central Provinces. There are 1,600 Church members and 11 Indian churches. The staff numbers 33 including women, with an Indian staff 150. Schools number 41 with 1,555 children. Only the rest are Primary Schools. There are small dispensaries at most of the stations *Secretary*, Rev A G Danielsson, D D, Chindawara, C P.

The Hermannsburg Evangelical Lutheran Mission began its work in India in 1866 and operates in the South Malabar, the East Chittore and South East Caddapa Districts. There are 22 Indian Churches, 1 European Missionaries and 178 Indian workers, Church members number 3,170. Women's work is done in 20 girls, in a fourth, in a large Industrial school for educational work. There are 91 Lower grade Elementary schools 1 High school, 1 Lower Secondary, and 2 Higher grade schools, and 1 Lepet Asylum is stationed at Kodur with a Dispensary, and a large Industrial school at Kayadupla. Since the beginning of 1914 a

part of the field of the Hermannsburg Mission has been ceded to the E V Luth Joint Synod of Ohio and other States in U S America, who had expressed the wish to enter the field. Kodur and Puttur with the leper asylum at Kodur were ceded to them with 2 European missionaries, 26 Indian workers and 444 church members. The Hermannsburg Mission's *Secretary* is as yet acting for the Ohio Mission also *Secretary*, Rev J Rohwer Guntur, Nellore Dist, Madras.

The Schleswig Holstein Evangelical Lutheran Mission, commenced in 1864, operates in the Vizagapatam District. There are 12 stations, a total Missionary staff of 44, with 441 Indian workers. The growth in the Christian population has been from 1,530 in 1901 to 16,550 in 1914. Communicants number 4,140, and Catechumens 7,862. Education work comprises 1 Theological Seminary, 1 Secondary, 1 Industrial, and 100 Elementary schools, providing for 2,716 pupils. There are 9 Dispensaries with 50,000 patients for the year. English Services are held in the Mission Church at Jeyapore *Secretary*, Rev J Th Timmecke, Korampul.

**LEIPZIG EVANGELICAL LUTHERAN MISSION, GERMAN DIOCESE**—The mission commenced in 1834, and is confined to the Tamil speaking areas, chiefly in the Madras Presidency, with an Indian Minister and Church, in addition, in Bangalore. The total European staff numbers 31, ordained Indian Ministers 22 and 97 Indian workers, Organized Churches, 33 places of worship, 221, Baptized membership 18,868. There are 226 boys' schools (including 1 Training, an industrial and 4 Secondary schools) and 23 girls' schools, including an industrial school. The teaching staff numbers 494 and pupils 10,168. Zenana work is actively prosecuted. A Printing Press and Publishing House are established at Tranquebar. *President*, Rev Th Meyner, Kilpankur, Madras.

THE BASEL MISSION was commenced in 1834, and occupies 26 main stations and 125 outstations in the Coorg, S Malabar, Nilgiris, and N and S Canara districts of S W India. The total European staff numbers 159 with 1,110 Indian workers. There are 66 organized Churches, with a membership of 19,762. Educational work embraces 204 schools (including 2 Theological, 9 Boarding and 4 High schools) with 16,974 Elementary and 3,150 Secondary school pupils and 831 scholars in Boarding Institutions and Orphanages. There are good Hospitals at Bellin and Calicut under European doctors with 3 branch hospitals and 4 Dispensaries connected, 66,504 patients were treated last year. There is a Lepet Asylum at Chervayur.

The Industrial work of the Mission is second to none in India and comprises 17 establishments, embracing one mechanical establishment of a first rate order at Mangalore, 2 Mercantile branches, 7 Weaving and 7 Lile work establishments in the Kanara and Malabar districts, employs number 3,633. A large Printing Press at Mangalore issues publications in the Kanarese, Malayalam, Tulu and English languages. Owing to the interference of a number of missionaries belonging to the Basel Mission, it has been impossible to revise the above figures which are for 1914.

*Secretary*, Rev A Schosser, Mangalore



**THE CHURCH OF SWEDEN Mission**—Was founded in 1871, and operates in the Madras, Tanjore and Pondicherry Districts. Since 1871 the Mission works independently, though in the early days it was connected with the Lutheran Church of America. The first station was at Pondicherry, where it had a large number of converts. It has since extended its work to other parts of the South Indian coast, and now has a large number of stations and converts. The Mission is supported by the Board of Christian Missions of the American Church at New York.

**THE AMERICAN WESLEYAN CHURCH** with 500 members has in recent years taken over an important part of the work of the Lutheran Church of America in the South Indian coast. The American Wesleyan Church has a large number of stations and converts, and is supported by the Board of Christian Missions of the American Church at New York. The American Wesleyan Church has a large number of stations and converts, and is supported by the Board of Christian Missions of the American Church at New York.

**THE REFORMED EPISCOPAL CHURCH OF AMERICA** (Methodist) at Pondicherry and Tanjore. It has a large number of stations and converts, and is supported by the Board of Christian Missions of the American Church at New York. The Reformed Episcopal Church of America has a large number of stations and converts, and is supported by the Board of Christian Missions of the American Church at New York.

**THE WESTERN METHODIST MISSIONARY SOCIETY** commenced work in India in 1817 (origin in 1814). The Mission in India is organized into 10 District Synods with 3 Provincial Synods. There is a large English work connected with the Society, 20 ministers giving their whole time to literary work and English churches. The districts occupied include 64 man stations in Bengal, Madras, Mysore, Bombay, Punjab Central Provinces, Hyderabad, (Nizam's Dominions), Trincomalee and Burma. The European staff numbers 143 with 2,497 Indian workers, Communicants 18,937, and total churches 93. Educational work comprises 4 Christian Colleges, students, 560, 10 Theological Institutions, pupils, 80, 11 Training Institutions, pupils, 98, 20 High Schools, pupils, 3,439, 71 Boarding schools, scholars, 2,478, 10 Industrial schools, pupils, 602, 1,117 Elementary schools, with 37,338 scholars in Medical work there are 12 hospitals, 22 dispensaries, 18 qualified doctors, 2,984 in-patients and 75,703 out-patients for the year.

The above particulars are those published for 1914. The Women's Foreign Missionary Society of India is divided into 7 Conferences and is co-extensive with the main work of the Mission. Upwards of 172 Lady Missionaries are engaged in Educational, Zenana, and Medical work. The Secretary for the Bombay Conference is Miss A. Abbott, The Mysore, Bellary and Bangalore Conferences are under the supervision of the Mission. Untrained Ministers stand at 1,569 with 39,057 students, Sunday School scholars stand at 120,000 and young people's societies at 604. Generally known as Epworth Leagues, thirty Anglo Indian Congregations are found in the larger cities, with one College, 6 High schools, and numerous Middle schools for this class. For Anglo-Vernacular Education the Mission has 3 Colleges, 12 High schools and 62 schools of lower grade. The net increase from the non-

Secretary, Miss L. D. Collins, Teotoma, Berar.

## ROYAL ARMY TEMPERANCE ASSOCIATION.

In 1862 there was started among the British troops in Agra a small Society, under the leadership of Rev G Gresson, Baptist minister, which after a short time took the name of the Soldiers' Total Abstinence Society.

For some ten years the Society struggled with varying success, spreading to other Garrison Stations, but at the end of that time, though it had obtained recognition from the Horse Guards, and was the first Society whose Pledge was so recognised, the membership was not more than 1,200. In the year 1873, however, through the influence of the then Commander-in-Chief, the work was placed on a firmer footing, the Rev Gelson Gresson gave up his whole time to it, and by accompanying the troops through the Afghan War, making an extended tour through Egypt, and bringing the work into close touch with troops, both during peace and war, in the year 1880, when he left the Society, it numbered about 11,000 members. He was followed by a Madras Chaplain, who after two years gave place to the Rev J H Bateson in 1886, the late Lord Roberts, Commander-in-Chief, organised his Scheme for Regimental Institutes, which have had a wonderful effect on the life of British soldiers in the East, and the Total Abstinence Society was so far incorporated into the scheme as to be allowed ample accommodation, and many practical benefits, in every Unit. At the same time the name was changed to that of the Army Temperance Association, and the work of various societies thus linked together, under one organisation. The effect has been more than even the inauguration of itself ever hoped for. The membership rose steadily from that date and still increases.

**Growth of the Society.**—In 1880 there were 12,172 members in 1899, 20,688, in 1909, or over 45 per cent of the total garrison in India. In 1908, the Secretary having retired after 20 years' work, the Rev H C Martin, V.A., a Chaplain in Bengal, was selected by H E Lord Kitchener, to the post of Secretary. Twenty years ago, the Association, which has now for some years been the Royal Army Temperance Association, with the Patronage of King Edward VII, and later of the King Emperor, George V, organised a similar Society in Great Britain, with headquarters in London, from which the troops in South Africa, the Mediterranean, etc., are controlled, so that the whole British Army receives the attention of the Association.

**Effect in the Army.**—In the year 1889, 1,174 British soldiers died in India, and 1,800 were invalided with further duty, in 1910, only 330 died, and 484 were invalided. In 1889, 688 underwent treatment for Delirium tremens, in 1910, only 37. In conduct the same difference is to be found, as late as 1901 as many as 545 Courts Martial were held on men for offences due to excessive drinking, in 1906 only 217. In 1904, 2,231 good conduct medals were issued, in 1910, there were 4,581. In regard to the character of the men themselves, who become members of the Association, during their service, we find that in 1912, 59 per cent on transfer from the Colours obtained Exemplary character, and 93 per cent either Exemplary or Very Good, the remainder were for the most part men who, after some years of heavy drinking, had towards the end of their service been persuaded to try and reform themselves, but not soon enough to avoid the consequences of previous excess.

**Organisation.**—The War has necessarily brought increased work upon this society, the results of which were very quickly apparent. Capacious reception sheds fitted up in the Docks at Bombay and Karachi, proved of the greatest value to troops moving from India, and to the large number coming in special arrangements aided by a loan from the government of India, enabled the R.A.T.A. to organise branches in every Territorial unit immediately on arrival, special attention being paid to small detachments and to the Hill stations. In consequence there were, within a month of the completion of the Garrison, over 70 Territorial Branches, containing nearly 50 per cent of the new recruits. In addition to covering all troops from Aden to Singapore, the R.A.T.A. is the only Society working among the Troops of I.E.F. "D", the force in the Persian Gulf. Institutes have been opened and the cordial good will of the authorities enables the R.A.T.A. to provide many amenities to the very trying expeditions of this force. The men relieved, and sent back to India for periodic rest, in addition, receive a warm welcome and entertainment at the hands of the Association. The following is the organisation of the Council and management.

**Patron** His Majesty the King Emperor  
**President** His Excellency the Commander-in-Chief



# Warrant of Precedence in India.

(Brought up to 1 January, 1915)

VICTORIA, by the Grace of God of the United Kingdom of Great Britain and Ireland Queen, Defender of the Faith, Empress of India,—

To all to whom these presents shall come

WHEREAS it hath been represented unto Us that it is advisable that the rank and precedence of persons holding appointments in the East Indies as regulated by Our Royal Warrant, dated the 18th day of October, 1876, should be altered. We do therefore hereby declare that it is Our will and pleasure that in lieu of the table laid down in Our said recited Warrant, the following table be henceforth observed with respect to the rank and precedence of the persons hereinafter named, viz —

- 1 Governor-General and Viceroy of India
- 2 Governors of Madras, Bombay and Bengal
- 3 President of the Council of the Governor-General
- 4 Lieutenant-Governor when in his own territories
- 5 Commander-in-Chief in India
- 6 Lieutenant-Governor
- 7 Chief Justice of Bengal
- 8 Bishop of Calcutta, Metropolitan of India
- 9 Ordinary Members of the Council of the Governor-General
- 10 Commander-in-Chief of Her Majesty's Naval Forces in the East Indies
- 11 Chief Justice of a High Court other than that of Bengal
- 12 Bishops of Madras and Bombay
- 13 Ordinary Members of Council in Madras, Bombay and Bengal
- 14 General Officers Commanding the Northern and Southern Armies, Chief of the General Staff
- 15 Chief Commissioners of the Central Provinces and Assam, Residents at Hyderabad in Mysore, and Agents to the Governor-General in Rajputana, Central India, and Baluchistan, Executive Members of the Council of the Lieutenant-Governor of Bihar and Orissa, the Agent to the Governor-General and Chief Commissioner of the North-West Frontier Province [NOTE—When within their own jurisdiction these officers take precedence of those mentioned in Article 14]
- 16 Justice Judges of a High Court
- 17 Chief Judge of a Chief Court
- 18 Military Officers above the rank of Major-General
- 19 Comptroller and Auditor-General
- 20 Additional Members of the Council of the Governor-General for making Laws and Regulations, Chairman of the Railway Board
- 21 Bishops of Lahore, Rangoon, Nagpur and Lucknow
- 22 Secretaries to the Government of India, Joint Secretary to the Government of India in the Public Works Department, and Members of the Railway Board
- 23 Commissioner in Sind
- 24 Judges of a Chief Court, Recorder of Rangoon and Judicial Commissioners, Burma
- 25 Chief Secretaries to the Governments of Madras and Bombay, Chief Commissioner of Delhi

- FIRST CLASS
- 26 Major-Generals, Members of a Board of Revenue, Commissioners of Revenue and Customs, Bombay, Financial Commissioners, Punjab and Burma, the Inspector-General of Irrigation, and the Director-General, Indian Medical Service
  - 27 Judicial Commissioners, including Additional Provincial Commissioners and Sind Central Provinces and Sind
  - 28 Additional Members of the Councils of the Governments of Madras, Bombay and Bengal for making Laws and Regulations, Members of the Legislative Council of a Lieutenant-Governor
  - 29 Vice Chancellors of Indian Universities
- SECOND CLASS
- 30 Members of the Indian Civil Service of 30 years' standing
  - 31 Advocates-General, Calcutta
  - 32 Commissioners of Divisions, the Superintendent of Port Blair, and Residents, Political Agents, and Superintendents drawing Rs 2,000 a month and upwards (not being Collectors or Deputy Commissioners of British Districts), with their respective charges, the Revenue and Judicial Commissioners in Baluchistan, and Baluchistan and the Agency Territories with Baluchistan and the Agency Territories
  - 33 Chief Secretaries to Local Governments other than those of Madras and Bombay
  - 34 Surveyor-General of India, Directors-General of the Post Office, of Telegraphs in India and of Railways, Chief Engineers, first class, and the Directors of Railway Construction and Railway Traffic, Accountants-General, Military and Public Works Departments, Director, Royal Indian Marine, and Manager, North-Western Railway
  - 35 Bishops (not territorial) under license from the Crown
  - 36 Archdeacons of Calcutta, Madras and Bombay
  - 37 Brigadiers-General, Consuls-General and Judicial Commissioners in Baluchistan when in Kalat or Las Bela or elsewhere without the limits of his charge
  - 38 Commissioners of Divisions, the Revenue and Judicial Commissioners in Baluchistan when in Kalat or Las Bela or elsewhere without the limits of his charge
  - 39 Commissioner of Northern India Salt Revenue, Opium Agents, Benares and Bihar, and Director, Central Criminal Intelligence Department
  - 40 Secretaries and Joint Secretaries to Local Governments, and Private Secretaries to the Viceroy
  - 41 Members of the Indian Civil Service of 23 years' standing and Colonels, Consuls
  - 42 Military Secretary to the Viceroy
  - 43 Judicial Commissioners of the Hyderabad Assigned Districts and Baluchistan, the Superintendent of Port Blair, Residents, Political Agents, and Superintendents drawing Rs 2,000 a month and upwards (not being Collectors or Deputy Commissioners of British Districts)
  - 44 Inspector-General of Forests in India, Director of the Geological Survey, and Director-General of Education in India, Sanitary Commissioner with the Government of India

67 Directors of Public Instruction, Inspectors-General of Police and Prisons under Local Administrations, Commissioners and Deputy Auditors General, and Deputy Directors, Central Criminal Intelligence Department.

68 Ministers of State (always other than the North-Western Railway, Chairman of the Port Trust, Bombay, and Kangoon, and Chairman of the Port Trust, Calcutta).

69 Vice-Chairman of the Port Trust, Calcutta, Directors of Trade and Construction, Criminals Department, Directors of Public Works Department, first class, Officers of the Public Works Department, first class, Inspectors, first grade, Superintendents, first class, Public Works Department, first class, Superintendents of the Survey of India Department, first grade, Superintendents of the Survey of India Department, first grade, Inspectors General of Registration and Directors of Land Records and Agriculture, and Vice-Commissioners under Local Government.

71 Senior Chaplains other than those specially appointed.

72 Officers within their own charges.

73 Officers in the Second Class Graded List of Civil Officers not reserved for Members of the Indian Civil Service, Political Agents and Superintendents in British India drawing less than Rs 2,000, and Political Agents in Harmer and Tomb, when outside their respective charges (unless their Army rank or standing in the Civil Service gives them a higher place).

Actuary to the Government of India.

**FOURTH CLASS**

71 Members of the Indian Civil Service of 12 years' standing, and Majors, Vice Consuls, District Judges in Four Burma and Judge of Small Cause Court, Kangoon (outside their respective charges).

72 Inspectors of over 8 years' standing, and Chief Inspectors of the Royal Indian Marine, Ordnance Sectors.

73 Government Solicitors.

74 Inspectors General of Registration, Sanitary Commissioners, and Directors of Land Records and Agriculture under Local Administration, Civil Engineer, Adviser to the Director of Ordnance Factories.

75 Officers in the Third Class Graded List of Civil Officers not reserved for Members of the Indian Civil Service, Deputy Accountants, office of the Director of Ordnance Factories.

The entries in the above table apply exclusively to the persons entered therein, and while relating their relative precedence with each other, do not apply to the non-official community resident in India, the members of which shall take their place according to usage.

Officers in the above table will take precedence in order of the numbers of the entries. Those included in one number will take precedence in order of the date of entry into that number.

When an officer holds more than one position in the table, he will be entitled to the highest position accorded to him.

Officers who are temporarily officiating in any number in the table will rank in that number below permanent incumbents.

to the Government of India.

1. Secretary to the Government of India.

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100. Secretary to the Government of India.

All officers not mentioned in the above table, whose rank is regulated by comparison with rank in the army, to have the same rank with reference to civil servants as is enjoyed by Military Officers of equal grades.

All other persons who may not be mentioned in this table, to take rank according to general usage, which is to be explained and determined by the Governor-General in Council in case any question shall arise.

Nothing in the foregoing Rules to disturb the existing practice relating to precedence at Native Courts, or on occasions of intercourse with Natives, and the Governor-General in Council to be empowered to make rules for such occasions in case any dispute shall arise.

herein assigned to their respective husbands, All ladies to take place according to the rank of their husbands, and who are not in rank below the daughters of Barons, such ladies to take place according to their several ranks, with reference to such precedence in England, immediately after the wives of Members of the Council of the Governor-General.

Given at Our Court at Windsor this tenth day of December, in the year of Our Lord One thousand eight hundred and ninety-eight, and in the sixty-second year of Our Reign

By Her Majesty's Command,  
(Signed) GEORGE HAMILTON,

### Supplementary Graded List of Civil Offices not Reserved for Members of the Indian Civil Service Prepared Under the orders of the Governor-General in Council

Divisional and District and Sessions Judges  
Examiners of Accounts, Public Works  
Department, 2nd and 3rd Classes  
Government Astronomer, Madras  
Government Emigration Agents at Calcutta, for British Guiana and Natal, and for Trinidad, Fiji, Jamaica, and Mauritius  
Imperial Bacteriologist  
Inspector of Mines to the Government of India  
Librarian, Imperial Library  
Officers in charge of the Records of the Government of India  
Officers of the Indian Educational Service, and of the graded Educational Service drawing Rs 1,250 a month and upwards  
Officers of the Superior Revenue Establishment of State Railways, 1st Class, 2nd and 3rd Grades  
Principal of the Mayo College at Ajmere  
Principal of the Rajkumar College at Rajkot  
Reporter on Economic Products  
Superintendent of the Royal Botanical Gardens, Calcutta  
Superintendents, Geological Survey of India  
Superintendents of Revenue Survey and Assessment, Bombay  
Superintendents of the Survey of India Department, 2nd Grade  
Superintending Engineers, Public Works Department, 2nd and 3rd Classes  
Under Secretaries to the Government of India  
\*THIRD CLASS—(No 78 of the Warrant)  
Agricultural Chemist  
Assistant Directors of Dairy Farms  
Assistant Inspector-General of Forests  
Assistant Secretaries to the Government of India  
Chief Chemical Examiner, Central Chemical Laboratory, Natal  
Collector of Stamp Revenue, Superintendent of Excise Revenue and Deputy Collector of Land Revenue, Calcutta  
Commander of the steamer employed in the Persian Gulf Section of the Indo-European Telegraph Department  
Constructors of the Royal Indian Marine Classes

\*FIRST CLASS—(No 55 of the Warrant)  
Assay Master of the Mint, Calcutta and Bombay  
Chief Judges of Presidency Courts of Small Causes  
Commissioners of Police, Calcutta, Madras, Bombay, and Raugoon  
Controller of Printing and Stationery  
Deputy Comptroller-General  
Director-General of Archaeology  
Director-General of Statistics  
Director of the Botanical Survey of India  
Inspector-General of Agriculture in India  
Masters of the Mint, Calcutta and Bombay  
Meteorological Reporter to the Government of India  
Superintendent of Revenue Survey, Madras  
\*SECOND CLASS—(No 73 of the Warrant)  
Advertiser on Chinese Affairs in Burma  
Agent General in India for the British Protectorates in Africa under the Administration of the Foreign Office  
Chief Collector of Customs, Burma  
Chief Constructor of the Royal Indian Marine Dockyard at Bombay  
Chief Inspector of Mines in India  
Chief Presidency Magistrates  
Chief Superintendents of the Telegraph Department  
Collector of Customs and Salt Revenue, Sind  
Collectors and Magistrates of Districts, and Deputy Commissioners of Districts and of Settlements  
Conservators of Forests, 2nd and 3rd Grades  
Deputy Accountants General under Local Governments  
Deputy Directors of Telegraphs  
Deputy Inspectors-General of Police  
Deputy Superintendent of Port Light  
Directors of the Persian Gulf Section, and at the Persian Section of the Indo-European Telegraph Department  
Director of Telegraphs, 2nd, 3rd and 4th Classes









## Salaries of Chief Officers

Payable Annuum Rs	
36,000	1 Chief Commissioner of Delhi
36,000	1 Director, Criminal Intelligence
18,000 to 24,000	1 Deputy Director, Criminal Intelligence
31,800	Inspector-General of Forests
36,000	Surveyor-General, Survey of India
22,200	1 Chief Inspector of Mines in India
36,000	1 Director-General, Indian Medical Service
24,000 to 30,000	1 Sanitary Commissioner with the Government of India
20,400	1 Director-General of Archaeology in India
24,000	1 Administrator-General of Bengal
24,000	1 Director-General of Commercial Intelligence
24,000	1 Indian Observatories
18,000 to 24,000	1 Contoller of Stationery and Printing
12,000	Governors of Madras, Bombay, and Bengal
18,000	Private Secretaries to Governors of Madras, Bombay, and Bengal
12,000	Surgeons to Governors of Madras, Bombay, and Bengal
12,000	Military Secretary and Aide-de-Camp to Governors of Madras, Bombay, and Bengal
19,976	Bishop of Calcutta
25,600	Bishop of Madras
25,600	Bishop of Bombay
25,600	Chief Justice of Bengal
72,000	Chief Justices of Madras, Bombay, and the North-Western Provinces
60,000	Puisne Judges of the High Courts of Calcutta (15), Madras (6), Bombay (6), and the
48,000	Chief Judge of the Chief Court, Punjab
48,000	Burma
48,000	Judges of the Chief Court, Punjab (+), and Burma (+), except Chief Judges
48,000	2nd class
33,000	Political Officers on time scale
5,400 to 28,800	
<b>Provincial Salaries.</b>	
N B—Acting and other allowances are not included in the salaries shown	
<b>Bengal</b>	
64,000	4 Members of Council
45,000	5 Commissioners of Divisions
35,000	1 Chief Secretary to Government
40,000	3 Secretaries to Government
38,000	1 Under Secretaries to Government
12,000	1 Exercise Commissioner
21,600	1 Chairman of Corporation of Calcutta
42,000	1 Deputy ditto
12,000 to 18,000	1 Collector of Customs, Calcutta
30,000	12 Magistrates and Collectors, 1st grade
27,000	2nd
21,600	3rd
18,000	17 Joint Magistrates and Deputy Collectors, 1st grade
10,800	2nd
8,400	17 Assistant Magistrates and Collectors
6,000 to 4,800	3 District and Sessions Judges, 1st grade
36,000	13 " " " " " " " "
30,000	15 " " " " " " " "
24,000	1 Chief Judge, Presidency Courts of Small Causes
27,600	1 Judges
13,500	1 Advocate General
48,000	1 Solicitor to Government
60,000	1 Registrar, High Court
20,400	1 Inspector General of Police
30,000 to 36,000	1 Director of Public Instruction
24,000 to 18,000	1 Private Secretary to H E The Governor
21,600	1 Director of Land Record
18,000	1 Secretary of the Board of Revenue
18,000	1 Lieutenant Governor
60,000	2 Members of the Executive Council
42,000	3 Members of the Board of Revenue
<b>Bihar and Orissa</b>	



## Salaries of Chief Officers

Punjab— <i>cid</i>		Pay per Annum
2	Under Secretaries to Government	12,000
1	Under Secretary, Police Department, and Inspector-General of Police	30,000
1	Under Secretary, Educational Department	24,000
2	Financial Commissioners	42,000
2	Secretaries to Financial Commissioner	10,800 and 8,400
14	Deputy Commissioners, 1st grade	27,000
14	" " 2nd	21,600
14	" " 3rd	18,000
14	Assistant Commissioners, 1st grade	10,800
14	" " 2nd	8,400
30	" " 3rd	6,000 to 4,800
2	Divisional Judges, 1st grade	33,000
4	" " 2nd	30,000
6	" " 3rd	27,000
10	" " 4th	21,600
10	District Judges	18,000
1	Sub Judge and Judge, Small Cause Court, Simla	15,000
1	Registrar of the Chief Court	15,000
1	Legal Remembrancer	24,000
1	Inspector-General of Police	24,000
1	Director of Public Instruction	24,000
<b>Burma</b>		
1	Lieutenant Governor	1,00,000
1	Secretaries	36,000
2	Under Secretaries	21,600
1	Assistant Secretary	9,000
1	Financial Commissioner	6,000
1	Settlement Commissioner and Director of Land Records	42,000
1	Deputy Director of Land Records	33,000
1	Secretary to Financial Commissioner	19,200
1	Director of Agriculture	12,000
8	Commissioners of Divisions	18,000
12	Deputy Commissioners, 1st grade	33,000
13	" " 2nd	27,000
15	" " 3rd	21,600
12	Assistant	18,000
13	" " 1st	12,000
10	" " 2nd	8,400
52	" " 3rd	7,200
1	Judicial Commissioner	5,400 to 6,000
2	Divisional Judges, 1st grade	42,000
1	" " 2nd	33,000
2	" " 3rd	30,000
2	" " 4th	27,000
8	District	21,600
1	Registrar, Chief Court, Lower Burma	14,400
1	Government Advocate	18,000 to 21,600
<b>Central Provinces</b>		
1	Chief Commissioner	62,000
1	Financial Commissioner	42,000
5	Commissioners of Divisions	33,000
10	Deputy Commissioners, 1st class	27,000
11	" " 2nd	21,600
13	" " 1st	18,000
10	Assistant	10,800
10	" " 2nd	8,400
1	Judicial Commissioner	4,800 to 6,000
2	Additional Judicial Commissioners	42,000
4	Divisional and Sessions Judges	36,000 and 33,000
2	District and Sessions Judges	14,800 to 18,240
1	Inspector-General of Police	14,000 and 20,400
1	Director of Public Instruction	27,000 to 33,000
18,000 to 24,000		
<b>Berar</b>		
1	Commissioner	33,000
2	District and Sessions Judges	22,000 and 20,500



# Indian Orders

## The Star of India.

### Extra Knights Grand Commanders (G C S I)

- H M the Queen
- H R H The Duke of Connaught

### Knights Grand Commanders (G C S I)

- H H the Gaekwar of Baroda
- H H the Maharaja of Udaipur
- H H the Maharajah of Jaipur
- H H the Maharaja of Travancore
- The Marquis of Lansdowne
- Baron Ray
- The Earl of Elgin
- H H the Maharaja of Jammu and Kashmir
- H H the Maharaja of Kohlapur
- H H the Maharaja of Gwalior
- Lord Harris
- H H the Maharaja of Rewa
- Baron Macdonnell
- H H the Maharaja of Idar
- Earl Curzon of Kedleston
- Baron Sandhurst
- Lord George Hamilton
- H H the Raja of Cochin
- Baron Ambylall
- Narajra Raj Chandra Shamsheer Jung of Nepal
- H H the Maharaja of Orcha
- H H the Maharaja of Mysore
- Field-Marshal Viscount Kitchener
- H H the Begum of Bhopal
- Sir Stewart Bayley
- Sir Dennis Fitz-Patrick
- Baron Sydenham
- Sir Arthur Lawley
- Sir John Hewett
- H H the Maharaja of Bikaner
- H H Maha Rao of Kotah
- General Sir O'Moore Creagh
- H H the Raja of Kapurthala
- H H the Nizam of Hyderabad
- H H the Aga Khan
- H H the Nawab of Tonk

### Knights Commanders (K C S I)

- The Earl of Cromer
- Sir Joseph West Ridgeway
- Sir Theodore Craic Hope
- Sir William Chichele Plowden
- Sir James Broadwood Lyall
- Sir Charles Hanks Tod Crosthwaite
- Sir David Miller Barbour
- Sir Andrew Richard Scoble
- Sir Phillip Percival Hutchins
- Sir Henry Edward Stokes
- Sir Henry Lortimer Durand
- Major-General Sir Oliver Richardson Newmarch
- Sir Frederick William Richards Iyer
- H H Maharaja of Sirohi
- Sir Courtenay Percipine Herbert
- Lieut-Col Sir George Scott Robertson
- Sir William Lockhart Waird
- Brig Surge-Lieut-Col Sir Alfred Gwynne
- Leithbridge
- II H Maharaja of Bundi
- Sir Edward Charles Buck
- Sir William Mackworth Young
- Sir Charles Lyall
- Sir Robert Joseph Crosthwaite
- Sir William John Cunningham

The Order of the Star of India was instituted by Queen Victoria in 1861, and enlarged in 1866, 1876, 1897, 1902, and 1911, and the dignity of Knight Grand Commander may be conferred on Princes or Chiefs of India, or upon British subjects for important and loyal service rendered to the Indian Empire, the second and third classes of service in the Indian Empire of not less than thirty years in the department of the Secretary of State for India. It consists of the Sovereign, Grand Master (the Viceroy of India), the first class of forty-four Knights Grand Commanders (22 British and 22 Indian), the second class of one hundred Knights Commanders, and the third class of two hundred Companions, exclusive of Extra and Honorary Members, as well as certain additional Knights and Companions.

The Insignia are (i) the Collar of gold, composed of the lotus of India, of palm branches tied together in centre, of the united red and white rose, and in the centre an Imperial Crown, all enamelled in their proper colours and linked together by gold chains (ii) The Star of a Knight Grand Commander is composed of rays of gold issuing from a centre, having thereon a light blue enamelled circular ribbon, tied at the ends and inscribed with the motto of the Order, *Heaven's Light our Guide*, also in diamonds. That of a Knight Commander is somewhat different, and is described below (iii) The Badges, an onyx cameo having Her Majesty Queen Victoria's Royal Effigy thereon, set in a perforated and ornamental oval, containing the motto of the Order surmounted by a star of five points, all in diamonds (iv) The Mantle of light blue satin lined with white, and fastened with a cordon of white silk with blue and silver tassels. On the left side a representation of the Star of the Order.

The ribbon of the Order (four inches wide for Knights Grand Commanders) is sky-blue, having a narrow white stripe towards either edge, and is worn from the right shoulder to the left side. A Knight Commander wears (a) around his neck a ribbon two inches in width, of the same colours and pattern as a Knight Grand Commander, and pendant therefrom a badge of a smaller size, (b) on his left breast a star composed of rays of silver issuing from a gold centre, having thereon a silver star of five points resting upon a light blue enamelled circular ribbon, tied at the ends, inscribed with the motto of the Order in diamonds. A Companion wears from his left breast a badge of the same form as appointed for a Knight Commander, but of a smaller size, pendant to a like ribbon, of the breadth of one and a half inches. All Insignia are returnable to death to the Central Chancery, or if the recipient was resident in India, to the Secretary of the Order at Calcutta.

**Sovereign of the Order**—H I M The King  
**Grand Master of the Order**—The Viceroy for the time being, Baron Hardinge of Pembrokeshire  
**Honorary Knights Grand Commanders**  
 (G C S I)  
 The 22 Insult of Paris  
 Prince Louis d'Arenberg



George Moss Harriot  
Ernest Herbert Cooper W. J. Nish

Edward Vere Levinge  
Robert Nathan  
Arthur Meredith  
Lieut.-Col Charles Archer  
James Peter Orr  
Herbert Alexander Casson

William Axel Hertz  
Mahadev Bhaskar Chaudal  
George Seymour Curtis  
William Henry Clark  
Lieut.-Colonel Francis Aylmer Maxwell

Major Clive Wigram  
Herbert Thompson  
Rao Bahadur Nanak Chand  
Surgeon General William Burney Bannerman

Lieut.-Col John Ramsay  
Stuart Lockwood Maddox  
Gilbert Thomas Walker  
Lieut.-Col Philip Richard Thornagh Gordon  
Rohan Zulikar Ali Khan of Maler Kotla  
Col George Francis Angelo Harris  
Edmund Vivian Gabriel

John Stuart Donald  
Henry Montague Segundo Mathews  
Arthur Cromwellin Hanlin  
Faridoonji Jamsheji  
Maavi Ahmad Hussain  
Horne Charles Miles  
H. H. Raja Bije Chand, Chief of Kahlor  
Lieut.-Col Arthur Russell Aldridge  
Lieut.-Col Mathew Richard Henry Wilson  
John Charles Burnham

Col Thomas Francis Bruce Kenny-Talvour  
Michael Kennedy  
Thakor Karansinghji Vajiraji  
Meherban Mudoohji Rao Juvrao Naik Nana Nimbhar  
Lieut.-Col Alan Chatter de Lotbiniere Joly de Lotbiniere  
Brig.-Gen Herbert Vaughan Cox  
Brig.-Col Robert Smetton MacLagan  
Lieut.-Col Charles Mowbray Dallas  
Edward Henry Scamander Clarke  
Jagadish Chandra Bose  
Abbas Ali Baig  
Oswald Campbell Lees  
Lt.-Col G. G. Giffard  
F. W. Johnston  
William Henry Lucas  
A. I. Saunders  
Vahkatesinghji Kesarsinghji  
Paul Gregory Melfus  
Lieut.-Col Albert Edward Woods  
William Esall Tempest Bennett  
Hon Maj Sahibzada Obaidullah Khan  
William Ogilvie Horne  
Razhmaneri Sundaram Aiyar Sivaswami Aiyar  
William Harrison Moreland, C. I. E.  
Edward Albert Galt, C. I. E.  
Divan Bahadur Chaudh Raghunath Das, of Kotah

Col Leslock Hamilton Reid  
Surgeon General Henry Wickham Stevenson  
Hon Lieut.-Col Raja of Lambagranon  
Lionel Davidson  
George Carmichael  
Lieut.-Col Donald John Campbell MacXabb  
Lieut.-Col Henry Walter George Cole  
Stuart Mifford Fraser  
Henry Venn Cobb  
Behari Lal Gupta  
Henry Wheeler

Lieut.-Col. Sir Hugh Daly  
Raja of Burdwan  
Razab of Pahnas  
Sardar Badam Singh of Malaulah  
Sir Thomas Gordon Walker  
Col James White Thurburn  
Alfred Breerton  
William Thomas Hall  
Richard Townsend Greer  
Col. Robert Henry Jennings  
Sir Louis William Dane  
Sir Alfred Macdonald Buttel Irvin  
Lt.-Col James Bird Hutchinson  
Raja Ram Pal of Kotlehr  
Hermann Michael Kisch  
Sir Cecil Michael Wilford Brett  
Herbert Bradley  
Sir Frank Campbell Gates  
John Mitchell Holms  
Percy Seymour Vessey Fitzgerald  
Lt.-Col Wolloughby Pittcairn Kennedy  
Raja Narendra Chand  
Arthur Devala Youngshusband  
Oscar Theodore Barrow  
Col. Howard Goad  
Francis Alexander Slache  
Said Husain Bilgrami  
Percy Comyn Lyon  
Algernon Robert Sutherland  
Sir George Watson Shaw  
William Arbuthnot Inglis  
Romer Edward Youngshusband  
Col Herbert Mullaity  
John Alexander Brown  
John Henry Finnis  
Maharaj Bhairon Singh  
Maj.-Gen Sir Alfred William Lambart Daly  
Mautee Walter Fox-Strangways  
William Lochiel Saple Lovett Cameron  
Sir Edward Douglas MacLagan  
Raja Jadhoo Lal  
John Stratheden Campbell  
Lieut.-Col Charles Herbert  
Sir Ashtosh Mukharji  
Maj.-Gen Sir Henry Montague Pakington  
Hawkes

Dr. Rash Behari Ghosh  
Francis Cabel Harrison  
Lieut.-Col Sir Percy Zachariah Cox  
Comd. Sir Hamilton Pym Freer-Smith  
Andrew Lamond Castle Stuart  
Brig.-Gen William Riddell Birdwood  
Norman Goodford Cholmeley  
Walter Francis Rice  
Alexander Gordon Carlew  
Sir Frederick William Duke  
Claude Hamilton Archer Hill  
Cell Edward Francis Bunbury  
Col Reginald Henry Mahon  
Lieut.-Col Alexander Fleetwood Pinhey  
Capt Allen Thomas Hunt  
Walter Blackoch  
James Mollison  
Purnjinao Bapu Sahib Chitge  
Robert Woodburn Gillan  
John Walter Hose  
Charles Ernest Veat Goumont  
Harrington Vemey Lovett  
George Gilbert White  
Lieut. Col. Herbert Lionel Showers  
Frank George Sly





## Honorary Knights Commanders

(K C I E)

Sir Leon E. Clement-Thomson  
H. E. Sir Hussain Kuli Khan, Mookherjee-  
Dowlet

Sir Sven Hedlin  
The Sheikh of Mehamerah  
Gen. Sir Albert Houtum Schindler  
The Sheikh of Koweit  
The Sultan of Shehr and Mokalila

## Knights Commanders (K C I E)

Sir Alexander Meadows Rendel  
Sir George Christopher Moleworth Birdwood

Surg.-Gen. Sir Benjamin Simpson  
Sir Albert James Leppock Cappel

Sir Donald Mackenzie Wallace  
Sir Alfred Woodley Croft

Sir Bradford Leslie  
Sir Arthur Nicolson

Sir Gwillford Moleworth  
Sir Frederick Russell Hogg

Raja of Venkatasagiri  
Sir Henry Mortimer Durand

Sir Arthur George Macpherson  
Sir Henry Stuart Cunningham

Raja of Lunawara  
Sir Roper Lethbridge

Sir Edward Charles Kaye Ollivant  
Sir Henry Hoyle Howorth

Sir Henry Seymour King  
Sir John Lambert

Baron Inchcape  
Sir Henry Kevenshaw Thubiller

Sir Wm. R. Brooke  
Maharaja of Gidhanur

Lieut.-Col. Sir Adelbert Cecil Talbot  
Maj.-Gen. Sir Thomas Denny

H. H. Maharaja of Ajmer  
Sir Henry William Bliss

Nayab of Loharu  
Col. Sir William Bisset

Sir John Jardine  
Rear-Admiral Sir John Hely

Sir Laurence Bhowmager  
Col. Sir Thomas Holdich

Sir Arthur Wilson  
Sir Andrew Wingate

Raja Sir Harman Singh, Aluwalla  
Sir Alexander Cunningham

Sir Henry Evan Murchison James  
Xawab Sir Shahbaz Khan, Bugti of Baluchistan

Sir James George Scott  
Maharaja of Darbhanga

Col. Sir Samuel Swinton Jacob  
Sir Lawrence Hugh Jenkins

Sir Herbert Whitte  
Surg. Gen. Sir Benjamin Franklin

Sir Frederick Augustus Nicholson  
Raja Dhruv of Shikhar

Sir Gangaadhar Rao Ganesb, Chit of Muz

(senior branch)  
Sardar Sir Ghans Bahsh, Jaisani

Breret-Col. Sir Buchanan Scott  
H. H. Raja of Saluda

Lieut.-Col. Sir Francis Edward Younghusband  
Major-General Sir James R. T. Macdonald  
Sir Ugyen Wangchuk, Tongsa Penlop of

Bhutan  
Sir Fredric Styles Phillippe Tely

Lt.-Col. Sir Arthur Henry McLehon  
Gen. Sir Donald James Sim McLeod

Maharaja of Bahrampur  
Sir Francis Whitmore Smith

Nayab of Palahus  
Rajgarh H. H. Raja Sir Bane Singh Bahadur

Sir Thomas Gordon Walker  
Sir Arthur Naylor Wollaston

Sir Thomas Henry Holland  
Nayab of Hyderabad

Lieut.-Col. Sir George Olat Roos-Kepell  
H. H. Maharajadhiraja of Kishangarh

Raja of Alahundabad  
Sir Trevorwyn Rashleigh Wynne

Surg.-Gen. Sir Gerald Bomford  
Sir Richard Morris Dane

Maharajadhiraja of Burdwan  
Raja of Pooneh

Prince Ghulam Muhammad Ali, Khan Bahadur  
Sir William Stevenson Meyer

Sir Wilhelm Schlich  
Sir Theodore Morrison

Maj.-Gen. Sir Robert Irvin Seaton  
Sir John David Rees

Rear-Admiral Sir Edmund John Warre Slade  
Sir John Benton

Sir Frederick William Duke  
Sir Archibald Earle

Sir Charles Stewart-Wilson  
Maj.-Gen. Sir Malcolm Henry Stanley Grover

Sir Charles Baitt Cleveland  
Lieut.-Gen. Sir Douglas Haig

Lieut.-Col. Sir Hugh Daly  
Sir Henry Parsall Burt

Sir James Houssemayne Duboulay  
Sir Rajendra Nath Mukharyi

Lieut.-Col. Sir Henry Deantoy Thornhill  
Sir Gangaadhar Madho Chintavis

H. H. Navab of Jaora State  
H. H. Raja of Sitama State

Raj Sahib Sir Amarsinhji Bhanesinhji (Yanbaner)  
Sir Ram Krishna Gopal Bhandarkar

Rear-Adm. Sir Colin Richard Keppel  
Sir John Stanley

Sir Saint-Hill Bardeley-Wilmot  
Col. Sir Percy Zachariah Cox

Sir Francis Edgway Spring  
Maharaja Sri Sir Vikrama Deo

Rana Sir Shomaz Singh (U P)  
H. H. Maharaja of Alwar

H. H. Maharawal of Patitgarh  
H. H. Raja of Rajpala

Dewan Bahadur Sir Seth Kasturehand Daga  
H. H. Maharaja of Bijaur State, Bundeckhand

Gen. Sir Mowbray Thomson  
Sir George Abraham Grierson

Sir John Twigg  
Maj.-Gen. Sir Francis Henry

Rutherford  
H. H. Maharawal of Dungaipur

Nayab Sir Bahram Khan  
Sir Henry Alexander Kirk

Sir Alfred Gibbs Bourne  
Chief of Jamabandi

Sir Frank Campbell Gates  
Sir George Macartney

1. The first of these is the  
 2. fact that the majority of the  
 3. population of the country is  
 4. of the same race and language.  
 5. This is a very important  
 6. factor in the development of  
 7. the country, and it is one  
 8. of the reasons why the  
 9. country has been able to  
 10. develop so rapidly.

The second of these is the  
 fact that the country is  
 very rich in natural resources.  
 It has a large amount of  
 land, and it has a large  
 amount of water. It has a  
 large amount of coal, and it  
 has a large amount of iron.  
 It has a large amount of  
 copper, and it has a large  
 amount of gold. It has a  
 large amount of silver, and  
 it has a large amount of  
 platinum. It has a large  
 amount of diamonds, and it  
 has a large amount of rubies.  
 It has a large amount of  
 sapphires, and it has a  
 large amount of emeralds.  
 It has a large amount of  
 pearls, and it has a large  
 amount of ivory. It has a  
 large amount of fur, and it  
 has a large amount of  
 other valuable resources.  
 This is a very important  
 factor in the development of  
 the country, and it is one  
 of the reasons why the  
 country has been able to  
 develop so rapidly.

Lieut-Col John Ramsay  
 Robert Bateson Joyner  
 Charles George Palmer  
 Lieut-Col Samuel John Thomson  
 Lieut-Col Sir David Parkes Masson  
 Lieut-Col Frederick Fitzgerald MacCartie  
 Rai Bahadur Sir Bipin Krishna Bose  
 P C H Snow  
 Hony Lieut-Col Kumwar Bir Bikram Singh  
 Lieut-Col A B Mithchin  
 W T Van Someren  
 Charles Still  
 Col H K McKay  
 A Izat  
 Rai Bahadur Dhanpat Rai  
 Lieut-Col W B Brownling  
 Lieut-Col J J Holdsworth  
 Jack Francis Needham  
 Robert Giles  
 Vishwanath Patankar Madhava Rao  
 Col Walter Gaven King  
 James Syles Gamble  
 Sir George William Forrest  
 Lieut-Col Frank Popham Young  
 Reginald Hawkins Greenstreet  
 Khan Bahadur Kazi Jalal-ud-din, Ahundazada,  
 of handahar  
 John Sturrock  
 John Stuart Bercsford  
 Lieut-Col Malcolm John Meade  
 Edward Louis Cappell  
 Sir Lancelot Hare  
 George Moss Harriott  
 Frederick George Brunton Trevor  
 Rai Bahadur Kallika Das Datta  
 Divan Bahadur P Rajaratne Sivdajyar  
 Sir Walter Charleton Hughes  
 Edmund Penny  
 Henry Marsh  
 Col Aymer Martin (rofts  
 Lieut-Col Bertrand Evelyn Mellish Gurdon  
 Rai Bahadur Krishna Chandra Bose  
 Henry Felix Hertz  
 Courtenay Walter Bennett  
 H H Raja Sir Bhure Singh  
 Rear-Admiral Walter Somerset Goodridge  
 Col Solomon Charles Frederick Pelle  
 Bertram Prior Standen  
 Henry Alexander Sim  
 Lieut-Col Sir James Robert Dunlop Smith  
 Col John Crummin  
 Lieut-Col Granville Henry Loch  
 Farquhar Knivvart Tarapurvala  
 Babu Kail Nath Mitter  
 Sir William James Soulsby  
 Col William John Read Ramsford  
 Col Oswald Claude Redford  
 Major General George Kenneth Scott-Moncrieff  
 Lieut-Col Thomas Edwin Scott  
 Lieut-Col Laurence Austine Waddell  
 Col Asaf Ali Khan  
 Subadar-Major Sardar Khan  
 Hony Capt Yasim Khan  
 Commander General Edward Holland  
 Sidney Frislon  
 Sir Murray Hammett  
 Sir Alexander Pedler  
 Sir Richard Amphlett Lamb  
 Alexander Lauzun Pendock Tucker  
 Divan Bahadur Krishna Swami Rao  
 Lieut-Col John Clibborn  
 Col George Wignate  
 Lieut-Col George Hart Desmond Gwilette

Arthur Henry Wallis  
 Alexander Johnstone Dunlop  
 George Herbert Dacres Walker  
 Lieut-Col Alexander Fleetwood Finhey  
 Rai Bahadur Nana Chaud  
 Sir Spencer Harcourt Butler  
 Lieut-Col Frank Cooke Webb Ware  
 Hony Major Thomas Henry Hill  
 Alexander Porteous  
 Col Thomas Edward Lindsay Bate  
 Hon Lockhart Malthew St Clair  
 Marshall Reid  
 Rao Bahadur Pandit Sahdeo Peshad  
 Stuart Mifford Fraser  
 Lieut-Col Herbert Lionel Showers  
 Maj-Gen Francis Edward Archibald Chamber  
 Lt-Gen Ernest De Brath  
 Rai Bahadur Sir Pratap Chaudar Chatterji  
 Frederick Gurr Maclean  
 Walter Bernard de Winton  
 Algernon Elliott  
 Lt-Col Charles Arnold Kemball  
 Sir Herbert William Cameron Carnuff  
 Lieut-Col John Hodding  
 Edward Giles  
 Hariland Le Mesurier  
 Robert Nathan  
 Lieut-Col Alfred William Alcock  
 Arthur Hill  
 Douglas Donald  
 Jagdish Chandra Bose  
 Mehatar Shuja-ul-Mulk, of Chitral  
 Mir Muhammad Nazam Khan, Mir of Hunza,  
 Raja Sikandar Khan, of Nagar  
 Sir William Dickson Cruickshank  
 Thomas Jewell Bennett  
 Henry Wenden  
 Charles Henry Wilson  
 Rao Bahadur Shyam Sundar Lal, Divan of  
 Krishnagar  
 Robert Herriot Henderson  
 Mir Mehrulla Khan, Kasani  
 Nawab Fateh Ali Khan, Kazilbash  
 Faridoonji Janshedji  
 John Pollen  
 Charles Brown  
 George Huddleston  
 Lieut-Col Montagu William Douglas  
 Charles James Keene  
 Brigadier-General Havlock Hudson  
 Lieut-Col Arthur D'Arcy Gordon Bannerman  
 Rai Bahadur Ram  
 Robert Douglas Hare  
 William Bell  
 Claude Hamilton Archer Hill  
 Edward Henry Scamander Clarke  
 Webster Boyle Gordon  
 James Walker  
 Lieut-Col Robert Arthur Edward Benn  
 Madhu Sudan Das  
 George James Fernin  
 Raja of Killa Parthabgarh  
 Sir C Santharam Nayar  
 William James Porter  
 Stephen Finney  
 Edward Waller Stoney  
 Alexander Monro  
 Walter Home  
 C W Waddington  
 Raja Rampal Singh of Kori Sadhul  
 Khan Bahadur Bajorji Dornaji Patel  
 John Claude White

1 Lieut Col Francis Frederic Perry  
1 Lieut Col Francis Granville Reville  
1 Wm in Bth indur Divan Daya Kshen Kan  
1 Lieut Col Stuart Hill Godfrey  
1 Major Donvs Brooke Blakenay  
1 Khan Bahadur Sahbzada Abdul Qalyun

Khan  
 Maung Lath Loo  
 Col Ernest William Stuart King Macdonald  
 William Ellis Jardine  
 Thomas Corby Wilson  
 Col Alfred Horsford Bingley  
 Sir Frederick Loch Halliday  
 Lt Col Charles Thorp Jessop  
 Percy Wyndham  
 Hugh Spencer  
 Charles Ernest Low  
 Cecil Ward Chisholm Plowden  
 William King-Wood  
 Lieut Col Richmond Trevor Crichton  
 Khun Lai, Sawba of Lashiba  
 Albert Claude Verricks  
 Raja Kham Singh of Kamrupa  
 Raja Bahadur P Rajagopal Chavhar  
 Majant Khan Bakhsh  
 Muhammad Aziz-ud-din Khan

John Lewis  
Col James Henry Elias Brier  
Lieut-Col Henry Parkin  
Col Robert Nell Campbell  
Major Stuart George Knox  
Capt Cecil Godfrey Rawlings  
Edgar Thurston  
Rai Narthi Mai Bahadur of Kharjura  
Rai Bahadur Buta Singh  
James Bennett Brunsat  
Frederick James Wilson  
Henry Wheeler  
Reginald Edward Enghoven  
Col Wilfred Maleson  
Henry Venn Cobb  
Reginald Hugh Breton  
Xanthia Gopal Basu  
Thelley Souter

William Lochner  
Prabhanagar Pattana  
Joseph John Mulla  
William Didsbury Sheppard  
COL Rodenick Macrae  
Lieut - Col Victor Reginald Brooke  
Oswald Vivian Bosanquet  
Tanjore Madava Rao  
John Hubert Marshall  
William Arthur Johns  
Charles Michie Smith  
Lieut - Col Arthur Grey  
John Barry Wood  
Lt - Col George Grant Gordon  
Col Frank Goodwin  
Lieut - Col George Fiddes Campbell  
Archibald Young Barnard  
Andrew Blythe Gaidner  
James Adolpus Gaidner  
John Paul Warburton  
Shan State

James Herbert Seaborn  
James Walter Magee  
Walter Colley Wallace  
Lieut.-Col. Wallace Christopher H.  
James Scott

Major W. F. O'Connor  
Lionel Trumpler  
Col Robert Bird

David Bann, Horn  
I have Col Charles Brooke & McDonnell  
Richard Grant Peter Puckett  
Commander & Colonel Wilson  
Captain Thomas Webster Acamp  
William Hart on Moreland  
Edward Boyd Stevenson  
Frederick Papu Singh Chatter  
Richard Dobbie Ryan  
Henry Robert Cogswell Dobbie  
Secretary, William Phipps Webb  
Monsieur de Pommeroy  
Hugh William O'Brien  
I have Col Charles Archer  
Arthur William Low Pope  
Nicholas Dodd In-aton Bill  
George Frederick William Inbunt  
John & Alfred William Watson  
John & Alfred William Watson

Major Arthur Francis Ferguson  
 Major Arthur John O'Brien  
 Major Cunningham Clouston  
 Herbert C. Cunningham Ward  
 Thomas Robert John Ward  
 Brig. Gen. Sir Halls Forsythe  
 Lieut. Col. Charles Ferguson Campbell  
 Lieut. Col. H. H. Davis Watson  
 Hon. Brig. Gen. William George Keppel  
 Commander Sir Charles Leopold C. G. G.  
 Lt. Col. Sir David Prain  
 Col. William John Darnley Dundee  
 Hon. Capt. Malik Umar Hayat Khan, Tirva  
 of Bahra  
 Sir Ibrahim Pashimool  
 Rander Sundar Lal  
 Edward Albert Galt  
 Robert Grant Kennedy  
 Hon. Col. Arthur Hills Gladowe Newcomen  
 Lt. Col. Anthony Dorian  
 Major Thomas Pearson  
 William Clarke Campbell

Lieut Col Malcolm Sydney  
 Lieut Col Arthur Le Grand Jacob  
 John Robert  
 John Stratheden Campbell  
 Frederick Palmer  
 Shrimant Kund Rao Gaekwar  
 Thomas Henry Billingslet Biddulph  
 Surgeon-Lieut Col. Sir Warren Richard C  
 Lawley  
 Lieut-Col  
 George Claude-Henry Lord Strang  
 Francis St George Mansergh Smith  
 Lieut Col David Mervin Babbington  
 Sir Chundabai Madhavai  
 Samuel Dwyer  
 Pashanammern Sundaram Aiyar Sir  
 Francis Gu Suby  
 Major Gen William Riddell Burdwood  
 Major Gen Herbert Dobbie

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Lieut Col Edward Charles Bayley  
 Rai Bahadur Lala Shoo Prasad  
 Frederick William Johnstone  
 Maj Arthur Louis Bickford  
 Edward Gelson Gregson  
 William Malcolm Halliv  
 Col Benjamin William Marlow  
 Herbert Gerald Tomkins  
 Henry Whitby Smith  
 Major Francis Beville Pridaaur  
 Lieut Col Charles MacTaggart  
 Nawab Mirza Shahid Husain  
 Rai Krishan Shah Bahadur  
 Hopeston Gabriel Stokes  
 Lieut Col Leonard Rogers  
 Nawab Muhammad Abdul Majid  
 Ludovic Charles Porter  
 Henry Sharp  
 Arthur Venus  
 Mahamahopadaya Hara Prasad Shastri  
 Lt Col Allen McComaghey  
 Nawab Kaisar Khan, Chief of the Nagassi  
 Tribe  
 Rai Bahadur Divan Jamat Rai  
 Robert Charles Francis Volkers  
 Henry Hubert Hayden  
 Alexander Alured  
 Alexander Emanuel English  
 George Frederick Arnold  
 George Cunningham Buchanan  
 William Rucker Skelman  
 Edward Robert Kaye Blenkinsop  
 George Sandy Hart  
 Nawab Muhammad Salamuallah Khan Bahadur  
 Jagindar of Deulghat  
 John Henry Kerr  
 Col George Henry Evans  
 Lieut Col Henry Burden  
 Maharaja Raghunath Singh, of Dhasul  
 George William Kuchler  
 John Ghest Cunningham  
 Rev John Anderson Graham  
 Francis Hugh Stewart  
 Louis James Kershaw  
 William Taylor Cathcart  
 Murekjee Byramjee Dadabhoy  
 Hugh Murray  
 Sural Rao Raja Raghunath Rao Dinkar  
 (Gwalior)  
 Pandit Kailas Narayan Haksar  
 Lieut Col Ernest Douglas Money  
 Major Hugh Roderick Stockley  
 Mohshagumdan Visesvaraya  
 Lieut Col Richard Godfrey Jones  
 Jagindar Desraj Urs  
 Major Arjune Dretton Dew  
 Divan Bahadur Divan Amar Nath (Kashmir)  
 Lieut Col James Reed Roberts  
 Lieut Col James Impey  
 Col Alexander William Macrae  
 Arthur Ernest Lawson  
 Albion Rajkumar Banerji  
 Major Frederick Fenn Lives  
 Col William Burgess Wright  
 Cecil Archibald Smith  
 Sardar Shashur Singh, of the Jind State  
 Baba Gurbaksh Singh Bedi  
 Col Gilbert Walter Pailin  
 Lieut Col Robert Edward Pemberton Pigott  
 Lieut Col William Daniel Henry

General Branch Leakinge  
 Major John Glennie Greig  
 Sardar Naoraj Pundamji  
 Vata Lakshman Meram Chief of Thana-Dewi  
 Claude Alexander Barron  
 Leonard William Reynolds  
 Lt Col Percy Moleworth Sykes  
 Charles Archibald Walker Rose  
 Major Arthur Dennis Gilbert Ramsay  
 Major Rudolph E T Hoag  
 Capt John Mackenzie  
 Peter Langrishe Moore  
 Alfred Chatterton  
 Major Arthur Abercromby Dill  
 Lt Col John Lawrence William French-Vullen  
 Bernard Coventry  
 Albert John Harrison  
 Richard Hamilton Campbell  
 Rno Bahadur Bangalore Perumal Annaswami  
 Muddihar  
 Sidney Kilmer Levett-Yents  
 Frederick George Wigley  
 Prfulla Chandra Ray  
 Col Francis Raymond  
 Col Michael Joseph Tighe  
 Lieut Col William Bernard James  
 Major Sydney D'Aguiar Crookshank  
 Edward Denison Ross  
 John Hugh Cox  
 Khan Bahadur Muhammad Israr Hasan Khan  
 Major Reginald O Bryan Taylor  
 David Wann Alkman  
 Rai Bahadur Pandit Hari Krishan Kaul  
 Lieut Col Frederick William Wodehouse  
 Col Richard Henry Ewart  
 Col Mahitand Cowper  
 Thomas Walker Arnold  
 Lieut Col Charles Henry James  
 Rana Hira Singh of Dhami  
 Alexander Blake Shakespear  
 John Hope Simpson  
 Major Hugh Stewart  
 Major William Glen Liston  
 Lieut Col Edwin Henry de Vere Atkinson  
 Walter Stanley Talbot  
 Frank Adrian Lodge  
 Col Robert William Layard Dunlop  
 Lieut Col Walter James Buchanan  
 Hrishti Kesh Laha  
 Nalin Bhisan Gupta  
 Joseph Terence Owen Barnard  
 Lieut Col Townley Richard Filgate  
 Alexander Macdonald Rouse  
 Charles Cahill Sheridan  
 Capt Herbert de Lisle Pollard-Lowley  
 Major William Wilfrid Bickford  
 Henry Cuthbert Streetfield  
 Major Cecil Kaye  
 William Foster  
 Sardar Appaji Rao Ahkhar  
 W H Arden-Wood  
 Sartar Arun Singh  
 W C Ashmore  
 Major Blackham  
 P R Cadell  
 Capt W L Campbell  
 Major G S Crawford  
 W C V Dundas  
 Lt Col V N Hickley  
 H F Howard  
 J H Lacey  
 T Mercer

THE SOVEREIGN OF THE ORDER OF THE KING-EMPEROR OF INDIA  
Ladies of the Order (C 1)

This Order was instituted Jan 1, 1878, and for a like purpose with the simultaneous created Order of the Indian Empire It conferred the Queen and Queen Mother with some lists of the Queen and the female relatives of Indian Princes, and of persons who have held conspicuous offices in connection with India Badges, the royal cipher in jewels within an oval surrounded by an Heraldic Crown and attached to a bow of light blue watered ribbon, edged white

THE KING-EMPEROR OF INDIA  
Sovereign of the Order  
of the Order (C 1)

Her Majesty The Queen  
H M Queen Alexandra  
H M the Queen of Norway  
H R H the Princess Royal  
H R H the Princess Victoria  
H R H the Princess Christian of Schleswig-  
Holstein  
H R H the Princess Louise (Duchess of  
Argyll)  
H R H Princess Henry of Battenberg  
H I and R H the Dowager Duchess of  
Saxe-Coburg and Gotha  
H R H the Duchess of Albany  
H R H the Duchess of Cumberland  
H R H the Princess Fredericka Baroness of  
von Pawel-Rammingen Grand Duchess of  
H R H the Dowager Grand Duchess of  
Mecklenburg-Strelitz  
H R H the Princess Ferdinand of Roumania  
H I and R H the Grand Duchess Cyril of  
Russia  
H R H the Hereditary Princess of Hohenzollern  
Langenburg  
H R H the Crown Princess of Sweden  
H R H the Princess Victoria Elizabeth  
H R H the Princess, Hereditary Princess of  
Saxe-Miningen  
H R H the Princess Victoria of Schleswig-  
Holstein  
H H the Princess Marie-Louise of Schleswig-  
Holstein  
Baroness Kinsky  
Dowager Countess of Mayo  
Mrs Charles Coates  
Lady Jane Emma Crichton  
Dowager Countess of Lytton  
Dowager Baroness Lawrence  
Dowager Lady Temple  
Dowager Baroness Napier of Magdala  
Lady Grant Duff  
Dowager Marchioness of Dufferin and Ava  
Mrs George Cornwallis-West  
Baroness Reay  
H H Maharani of Cooh Behar  
Marchioness of Lansdowne  
Baroness Harris  
H H Maharani of Gwalior  
Constance Mary Baroness Wenlock  
H H Maharajah Sahib Chinnna Bai Gakwar  
H H Rani Sahib of Gondal  
H H the Dowager Maharani of Mysore  
George Hamilton

[illegible]

H. H. the Maharani Sahiba of Udaipur  
Alice, Baroness Northcote  
Nora, Henrietta, Countess Roberts  
Amella Maria, Lady Whit  
Mary Katherine, Lady Lockhart

Baroness Ampthill  
Countess of Alinto  
Marchioness of Creve  
H. H. Begum of Bhopal  
H. H. Maharani Shri Nundkavayaba

## THE KAISAR-I-HIND MEDAL.

This decoration was instituted in 1900, the preamble to the Royal Warrant—which was amended in 1901 and 1912—being as follows:—"Whereas We, taking into Our Royal consideration that there do not exist adequate means whereby We can reward important and useful services rendered to Us in Our Indian Empire in the advancement of the public interests of Our said Empire, and taking also into consideration the expediency of distinguishing such services by some mark of Our Royal favour Now for the purpose of attaining an end so desirable as that of thus distinguishing such services aforesaid, We have instituted and created, and by these presents for Us, Our Heirs and Successors, do institute and create a new Decoration," The decoration is styled "The Kaisar-i-Hind Medal for Public Services in India" and consists of two classes: The Medal is an oval shaped Badge or Decoration—in gold for the First Class and in silver for the Second Class—with the Royal Cypher on one side and on the reverse the words "Kaisar-i-Hind for Public Service in India." It is suspended on the left breast by a dark blue ribbon

## Recipients of the 1st Class.

Abdus Samad Khan of Rampur  
Ahmad, Khan Bahadur Qazi Khalil-ud-Din  
Alauddin, The Rev Samuel Scott  
Ammarchand, Rao Bahadur Rammaramayan  
Ampthill, Margaret, Baroness  
Aethon, Albert Frederick  
Barber, Benjamin Russell  
Barnes, Major Ernest  
Beary, Francis Montagu Algernon  
Beck, Miss Emma Josephine  
Bell, Lt-Col Charles Thornhill  
Benson, Lady  
Brantley, Dr Charles Albert  
Bhandari, Rai Bahadur Gopal Das  
Bhargava, Bng-Gurukul Alfred  
Biswas, Sardar Parashram Krishnarao  
Booth-Tucker Frederick St George de Lautour  
Bosquet, Oswald Vivian  
Bose, Dr Kalash Chandra  
Bramley, Percy Brooke  
Bray, General Denys Desamumarez, in Balu-chistan  
Broadway, Alexander  
Broughton, James Forest  
Buchanan, Rev John  
Burn, Richard  
Burnett, General Sir Charles John  
Cahan, Denis  
Campbell, Lieutenant Colonel Robert Neil  
Carrington, John Montagu  
Carter, Edward Clark  
Chandri, Rai Bahadur Hari Mohan  
Chatterton, Alfred  
Chaudhuri, Raja Sarat Chandra Rai  
Chetty, Dewan Bahadur K. P. Puttanna  
Chinnai, Ardeshr Dinshaji  
Chittravasi, Shankar Madho  
Coldstream, William  
Comley, Mrs Alice  
Cowasjee, Alernanice  
Cox, Arthur Frederick  
Crawford, Francis Colman  
Dane, Lady  
Darbhanga, Maharaja of  
Das, Kam Saran  
Davies, Arthur  
Davies, Mrs Edwin  
Dawson, Lieutenant-Colonel Charles Hutton  
Deobumre, Lieutenant-Colonel Herbert Edward  
Devay (Junior Branch), Raja of  
Dyal Singh, Sardar Alan, Sardar Bahadur  
Dyson, Lieutenant-Colonel Thomas Edward  
Earle, The Honble Sir Archdale  
Egerton, William  
Ewing, The Rev Dr J C R  
Francis, Edward Bulehm  
Gandhi, Mohandas Karamchand  
Ghosal, Mr Jyotsnath  
Glazebrook, N S  
Gonzaga, Rev Mother  
Graham, The Rev John Anderson  
Grattan, Major Henry William  
Guilford, The Rev E (with Gold Bar)  
Guthrie, Maharaja of  
Gwyther, Lieut-Colonel Arthur  
Hahn, The Rev Ferdinand  
Haig, Lieutenant-Colonel Patrick Balfour  
Hall, Harold Fielding Patrick  
Hamilton, Major Robert Edward Archibald  
Harvest, Lieut-Colonel Herbert de Vere  
Hildesley, The Rev Alfred Herbert  
Hodgson, Edward Marsden  
Hogan, W J, Alexander  
Holderness, Sir Thomas William  
Home, Walter  
Howard, Mrs Gabrielle Louise Carolin  
Humphreys, Robert  
Husband, Major James  
Hutchinson, Sir Sydney Hutton Cooper  
Huxford, The Maharani Jnan Manjari Kuoni of  
Huxford, Mrs Anna  
Irvine, Lieutenant-Colonel Thomas Walter  
Ives, Harry William Maclean  
Jacob, Colonel Sir Samuel Swinton  
James, Lieutenant-Colonel Charles Henry  
Jankibai  
Joshi, Ram Bhan Meghasham, Rao Bahadur  
Kapoor, Raja Ban Bihari  
King, Mrs D  
Krispatrick, Clarence



### Recipients of the 2nd Class

Southon, Major Charles Edward  
 Spence, Christina Philippa Agnes  
 St. Leon, William Douglas  
 St. Lucie, Reverend Mother  
 Stokes, Robert  
 Stokes, Dr Williams  
 Subhdeo Prasad, Pandit  
 T. Ward, The Rev Antoline Marie  
 Talmaj, Edajji Dornaji  
 Taylor, The Rev George Pritchard  
 Taylor, Dr Herbert F Lechemere  
 Thomas, The Rev Stephen Sylvester  
 Thurston, Edgar  
 Lully, Harry Lindsay  
 Tucker, Major William Hancock  
 Turner, Dr John Andrew  
 Tyrell, Major Jasper Robert Joly  
 Vaugan, Lieutenant-Colonel Joseph Charles  
 Vengopala, Raja Bahadur  
 Wagner, Rev Paul  
 Wake, Lieutenant-Colonel Edward St Aubyn  
 (with Gold Bar)  
 Wakefield, George Edward Campbell  
 Walker, Lady Fanny  
 Walter, Major Albert Euljah  
 Ward, Major Elliott Leamon  
 Wheeler, The Rev Edward Montague  
 Whitton, The Rev David  
 Williams, Lieutenant-Colonel James Sutherland  
 Wilkinson, the Lady  
 Willson Johnston, Joseph  
 Winter, Edgar Francis Latimer  
 Wood, Arthur Robert  
 Young, The Rev John, Cameron  
 Youngusband, Arthur Delaval  
 Edward

[illegible]

Bay, U Kan  
 Bayley, Lieut -Colonel Edward Charles  
 Beatson-Bell, Nicholas Dodd  
 Beg, Mirza Kamil Beg Fridun  
 Best, James Theodore  
 Beville, Lieutenant-Colonel Francis Granville  
 Bhagwandas, Bai Zaoerbai  
 Bhaajan Lal  
 Bhande, Pandit Balkrishna Govind  
 Bhide, Raghoo Jamaradhan  
 Bhut, Chhotelal Goverdhan  
 Biseshwar Nath, Lala  
 Biswas, Babu Ananda Mohan  
 Blackham, Major Robert James  
 Blackwood, John Ross  
 Blake, The Rev William Henry  
 Blenkingsop, Edward Robert Kaye  
 Bolster, Miss Anna  
 Borrah, Babu Bahadrayan  
 Bose, Miss Mona  
 Bowen, Griffith  
 Brahmamand, Pundit  
 Brandner, Mrs Isabel  
 Bremner, Major Arthur Grant  
 Brock, Miss Lillian Winifred  
 Brough, The Rev Anthony Watson  
 Browne, Charles Edward  
 Brown, Dr Edith  
 Burt, Bryce Chudleigh  
 Cain, Mrs Sarah  
 Campbell, The Rev Andrew  
 Campbell, Miss Kate  
 Campbell, Miss Susan  
 Campbell, Miss Mary Jane  
 Campbell, The Rev Thomas Vincent  
 Carr, Miss Emma  
 Carr, Thomas  
 Catherine, Sister  
 Castell, Major Gilbert Landale  
 Cecilia, Sister Fannie  
 Chamberlain, The Rev William Isaac  
 Chandler, The Rev John Scudder  
 Chatterji, The Rev K C  
 Chaudhuri, Purna Chandra  
 Chitale, Ganesh Krishna  
 Churchward, F A.  
 Chye, Leong  
 Chaney, John Charles  
 Clerk, Honorary Major Louis Arthur Henry  
 Clutterbuck, Peter Henry  
 Coombs, George Oswald  
 Correa, Miss Marie  
 Corthorn, Miss Alice  
 Cottie, Mr Adela  
 Coxon, Stanley William  
 Cummings, James William Nicol  
 Cummings, The Rev John Ernest  
 Cutting, Rev William  
 Dairymple-Hay, Charles Vernon  
 Das, Ram, Lala  
 Das, Mathurn, Lala  
 Das, Niranjan  
 Datta, Dr Dina Nath Pritha  
 Dawe, Miss Ellen  
 Dawson, Mrs Charles Hutton  
 Deane, George Archibald  
 Deodhar, (Dopul) Krishna  
 Deogl, Hazil Ahmed, Khan Sahib  
 Dehantsov, Mrs Mary Aphrasia  
 Desmond, Sergeant J  
 Dewes, Lieutenant-Colonel Frederick Joseph  
 Dharmarat, Sardar Bahadur  
 Dhillard Ik guni  
 Dip Singh, Lieutenant

Douglas, The Rev John  
 Dun, Maung Ne  
 Dundas, Charles Lawrence  
 Dunlop, Alexander Johnstone  
 Durjan Singh, Thakur U  
 Dutt, Aletha Harnam  
 Eagles, Thomas Cazaly  
 Edgell, Lieutenant-Colonel Edward Arnold  
 Emanuel, Mrs  
 Evans, The Rev John Ceredig  
 Evans, Miss Josephine Annie  
 Farrer, Miss Ellen Margaret, C  
 Farzand-i-Ahmad Khan Bahadur, Kazi Saiyid  
 Freynel, The Rev Father Etienne  
 French, Lieutenant-Colonel Thomas  
 Friesman, Thomas Charles  
 Fitchner, Miss  
 Forman, The Rev Henry  
 Fox, Alfred Charles  
 Frances, Sister Jane  
 Fraser, William  
 Fraser, Robert Thomson  
 Fryson, Hugh  
 Gajjar, Mrs Shivagauri  
 Galibai Bai  
 Garthwaite, Liston  
 George, Miss Jessie Eleanor  
 Godfrey, Thomas Leonard  
 Goenka, Baijnath  
 Goodbody, Mrs  
 Gorman, Patrick James  
 Goswami, Sri Sri Naradev Dakhinpat Adhikar  
 Grant, Major John Weyman  
 Grant, Mrs, nee Miss Lillian Blong  
 Grant, Miss Jean  
 Gray, Commissary William David  
 Greany, Peter Alvaie  
 Greenfield, Miss R  
 Griessen, Albert Edward Pierre  
 Gumbley, Mr Douglas  
 Gunn, Trimback Raghunath  
 Gyl, U Pet  
 Hazrat, Inabib Malik  
 Hanrahan, W G  
 Harrison, Henry  
 Harrison, Robert Tullis  
 Hart, Miss Louisa  
 Harvey, Miss Rose  
 Hatch, Miss Sarah Isabella  
 Haworth, Major Lionel Berkeley Holt  
 Hayles, Miss Mary Lavinia  
 Henderson, Miss Agnes  
 Higby, Miss Sarah J  
 Higgins, Andrew Frank  
 Hill, Elliott  
 Hoffman, The Rev Father John, S J  
 Holbrook, Major Bernard Frederick Roper  
 Holden, Major Hyla Napier  
 Holland, Dr Henry Tristram  
 Homer, Charles John  
 Hope, Dr Charles Henry Standish  
 Hughes, Thomas Onslow  
 Hunter, Honorary Captain James  
 Hutchinson, Dr John  
 Ihsan Ali  
 Jaljee Bai (Mrs Pettit)  
 Jalmath, Pandit  
 Jambharswari, A Horgo vandas  
 Joglekar, Rao Sahib Ganesh Venkatesh  
 Johnson, Augustus Frederick  
 Jones, The Rev John Peter



Rattansi Muzji!  
 Ray, Harindra Nath  
 Ray, Babu Sarat Chandra  
 Raz, Ali Khan, Sardar  
 Red, Mrs. Lillian  
 Richardson, Mrs. Catherine Stuart  
 Rita, Sidani Edward  
 Robinson, Captain Charles Stuart Hamiltqn  
 Robinson, James  
 Robinson, Lieutenant-Colonel William Henry  
 Banner  
 Roe, Brigadier-General Cyril Harcourt  
 Roe, Mrs. Edith Mary  
 Roushar, Lai, Lala  
 Ruskhabai, Dr  
 Rustoomji Faridoonji  
 Sadler A W Woodward  
 Sahar Ram Kahi  
 Sahay, Lala Deomath  
 Saint Monica, The Rev Mother  
 Salkeild, Tom  
 Samarth, Wasudeo Mahadeo  
 Samuels, Joseph  
 Schmitze, The Rev Frederick Volkmar Paul  
 Scotland, Lieutenant-Colonel David Wilson  
 Shah, Babu Lal Behari  
 Shab, Mohamed Kamal, Salyid  
 Shah, Mohammad Nawaz  
 Shah, Reverend Ahmad  
 Shamnath  
 Sheore, Raghunath Balwant  
 Shyam Nikh, Raja Francis Xavier  
 Shyam Sunder Lal  
 Simcoy, Arthur Henry Addenbrooke  
 Simkins, Charles Wykins  
 Simon, Sister M  
 Sinclair, Reginald Leahy  
 Singh, Ajai Dhul  
 Singh, Didar  
 Singh, Babu Harnath  
 Singh, Makkhan  
 Singh, Raja Bahadur, Padmanand  
 Singh, Babu Ramdhar  
 Singh, Sita B ish  
 Singh, Subada Sher  
 Singh, Kisildar Major, Hanwant  
 Smith, Mrs Ellen  
 Smith, The Rev Frederick William Ambery  
 Steele, The Rev John Ferguson  
 Steel, Alexander  
 Sturte, Oliver Harold Baptist  
 Sri Ram Kunwar, Thakurain  
 Sommerville, The Rev Dr James  
 Smith, Mrs Henry  
 Smith, The Rev

Stephens, John Hewitt  
 Stephens, Mrs Grace  
 Stevens, Mrs (Ethel)  
 Stevenson, Surgeon General Henry Wickham  
 Stewart, Major Hugh  
 Stewart, Mrs Lilian Dorothea  
 Stewart, Thomas  
 St Joseph, J D  
 Strip, Samuel Algenon  
 Sultan Ahmad Khan  
 Sunder Lal  
 Sundrabai, Bai  
 Surebhan Jaji  
 Swainson, Mrs Florence  
 Taleyarkhan, Mr Alankeshah Cavasha  
 Taleyarkhan, Mr Alankeshah Cavasha  
 Tamba, Dr Gopal Rao Ramchandarra  
 Tarpurwalla, Rardunji Kuvarji  
 Taylor, Rev Alfred Frideaux  
 Taylor, Mrs Florence Frideaux  
 Taylor, John Norman  
 Tha, Mlung Shwe  
 Thein, Mlung Po  
 Theobald, Miss  
 Thomas, Samuel Gilbert  
 Timothy, Samuel  
 Thompson, R. C  
 Thompson, Robert Douglas  
 Thomson, The Rev G Nicholas  
 Thoy, Herbert Dominick  
 Tok, Mlung Ba  
 Tok, Mlung Po  
 Thorn, Miss Bertha  
 Tomkins, Lionel Linton  
 Tndball, Miss Emma  
 Umar Khan, Malik Zorawar Khan  
 Visvesvaraya, Mokshagundam  
 Wait, Robert William Hamilton  
 Wakefield, George Edward Campbell  
 Walewaker, P Baburao  
 Waller, Frederick Chighton  
 Wares, Donald Home  
 Wares, Dr William James  
 Weghell, Mrs Dorothy  
 Weib-Ware, Mrs Dorothy  
 Weir, Henry  
 Western, Mrs Mary Priscilla  
 Wildman, Miss Elizabeth Annie  
 Wiseman, Honorary Captain Charles; Sheriffe  
 Woerner, Miss Lydia  
 Wood, The Rev A  
 Xerbury, Miss J  
 Young, Dr M. Y  
 Zahur-ul-Husain, Muhammad

# Indian Names and Titles.

**De-**—a Brahmanical priestly title, taken from the name of a divinity  
**Dharmy**—Lord of the Lands "added to  
 it," ac, it means "paramount"  
**Dewan**—a vizier or other first minister to a  
 native Chieft, either Hindu or Mohammedan,  
 and equal in rank with Sardar. The term is  
 also used of a Council of State  
**Lava Raja**—title given to the heir of the Jaha-  
 r of Lavanacore  
**Farzand** (with defining words added)—"ratio-  
 nality," or "beloved"  
**Fath**—victory  
**Fath-dawar**—victorious in battle" (a title  
 of the Zizam)  
**Gul-war** (sometimes **Gulcurar**)—title with  
 Jhabarra added or the ruler of Baroda  
 It was once a caste name and means "commander,"  
 i.e., the protector of the sacred animal, but  
 later on, in common with Holkar, and  
**Shindhar**, it came to be a dynastic appel-  
 lation and consequently regarded as a title  
 Thus, a Prince becomes "Gaskhar" on  
 succeeding to the estate of Baroda, Holkar,  
 of Gwalior  
**Hajir**—one who has made pilgrimage to Mecca  
**Hajir Lal**—"diamond ruby,"  
**Hollar**—ac, "Gaskhar"  
**Jah**—a term denoting dignity  
**Jam** (Shind or Balueh)—Cher  
**Kazi**—(better written **Qazi**)—a Mohammedan  
 magistrate  
**Rhan**—originally the ruler of a small Mohammed-  
 dan State, now a nearly empty title though  
 prize. It is very frequently used as a name,  
 especially by Afghans and Pathans  
**Rhanyah**—a Persian word for "master," some-  
 times a name  
**Kunwar** or **Kunwar**—the heir of a Raja  
**Lad**—a younger son of a Raja (strictly a feth-on,  
 but see under "Babu")  
**Lotman** or **Lotman**—"protector of the  
 world," title of the Chiefs of Dholpur and  
 Dattia  
**Maharaja**—a feudal title borne by the heads of a  
 Hindu religious body  
**Maharaja**—the highest of hereditary rulers  
 among the Hindus, or else a personal distinc-  
 tion conferred by Government. It has  
 several variations as under Raja, its feminine is  
 addition of **Maharaj**, its feminine is  
**Maharani** (maharaj-great)  
**Maharaj**—master, proprietor  
**Mian**—title of the son of a Rajput Xanab,  
 resembling the Scottish "Master"  
**Mir**—a leader, an inferior title which, like  
 "Khan," has grown into a name. It is  
 especially used by descendants of the Chahis  
 of Sind.  
**Mirza**—if prefixed, "Mr" or "Esquire"

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 tion conferred by Government. It has  
 several variations as under Raja, its feminine is  
 addition of **Maharaj**, its feminine is  
**Maharani** (maharaj-great)  
**Maharaj**—master, proprietor  
**Mian**—title of the son of a Rajput Xanab,  
 resembling the Scottish "Master"  
**Mir**—a leader, an inferior title which, like  
 "Khan," has grown into a name. It is  
 especially used by descendants of the Chahis  
 of Sind.  
**Mirza**—if prefixed, "Mr" or "Esquire"

**Mong, Mong, or Maung** (Arakanese)—leader  
**Moogyar or Moolyar**—a learned man or teacher  
**Mudiyar or Mudiyar**—a personal proper name, but implying "steward of the lands"  
**Munduz-ud-Daula**—distinguished in the State (Mull, in the country)  
**Mushir**—president, or presiding official  
**Myowun**—"Mr"  
**Nawab**—originally a Viceroy under the Moghul Government, now the regular leading title of a Mohammedan Prince, corresponding to "Maharaja" of the Hindus  
**Nazim**—a ruler (not to be confused with following)  
**Nizam**—the title of the ruler of Hyderabad, the one Mohammedan Prince superior to Nawab  
**Nono** (Tibetan)—the ruler of Spitta  
**Pandit or Pandit**—a learned man  
**Peshkur**—manager or agent  
**Prince**—term used in English courtesy for "Shahzada," but specially conferred in the case of "Prince of Arcof" (called also "Armin-1-Arof")  
**Raja**—a Hindu Prince of exalted rank, but inferior to "Maharaja." The feminine is **Rani** (Princess or Queen), and it has the variations **Raj, Rana, Rao, Rai, Rawal, Raval, Rajikar, Rakhbar, and Rajat**. The form **Rai** is common in Bengal, **Rao** in S. & W. India  
**Rajy Rajeshwur**—King of Kings  
**Risaldar**—commander of a troop of horses  
**Sahab**—the Native Hindu term used to or of a European, "Mr Smith," and his wife "Smith as 'Sahab,' but in addressing it would be occasionally appended to a title in the same way as "Bahadur," but inferior ("master"). The unusual combination "Nawab Sahab" implies a mixed population of Hindus and Mohammedans  
**Sahibzada**—son of a person of consequence  
**Sail, Sayil, Sayil, Sayil, Syud**—various forms for a title adopted by those who claim direct male descent from Mohammed's grandson Husain  
**Sardar** (corrupted to **Sirdar**)—a leading Government official, either civil or military, even a Grand Vizier. Nearly all the Punjab Barons bear this title. It and "Dewan" are like in value and used by both Hindus and Mohammedans. So, but Mohammedans only, are "Wah," "Sultan," "Amir," "Mir," "Mirza," "Nan," and "Khan"  
**Saur**—a Hindu title implying a slight distinction (ut, one-fourth better than others)  
**Saudica** (Burmese)—a Chief  
**Shahzad**—son of a King  
**Shakh or Sheikh** (Arabic)—a Chief  
**Shams-ud-Daula**—a Mohammedan title denoting "learned"  
**Shamsur-Jang**—"Sword of Battle" (a title of the Maharaja of Travancore)  
**Sidi**—a variation of **Said**

**Sindhia**—see under "Gaekwar"  
**Sri or Shri**—lit fortune, beauty, a Sanskrit term used by Hindus in speaking of a person much respected (never addressed to him, nearly as "Esquire"), used also of divinities. The two forms of spelling are occasioned by the intermediate sound of the s (that of s in the German *Stadt*)  
**Subadar**—Governor of a province  
**Sultan**—like "Sardar"  
**Syud, Syud**—more variations of "Said"  
**Talukdar**—an Oudh landlord  
**Talpur**—the name of a dynasty in Sind  
**Thakur**—a Hindu term equivalent to "Bahadur," whether as affix or alone  
**Ummandar**—a Persian word denoting some office  
**Umar**—term implying the Nobles collectively  
**Wali**—like "Sardar." The Governor of Khelat is so termed, whilst the Chiefs of Cabul are both "Wah" and "Mir"  
**Zemindar or Zamindar**—a landowner; orig a Mohammedan collector of revenue  
**Distinction Badges**—An announcement was made at the Coronation Durbar in 1911, that a distinctive badge should be granted to present holders and future recipients of the titles of "Dewan Bahadur," "Sardar Bahadur," "Khan Bahadur," "Rai Bahadur," "Rao Bahadur," "Khan Sahib," "Rai Sahib," and "Rao Sahib." Subsequently the following regulations in respect of these decorations were issued—(1) The decoration to be worn by the holders of the titles above mentioned shall be a badge or medalion bearing the King's effigy crowned and the name of the title, both to be executed on a plaque or shield surrounded by a five-pointed star surmounted by the Imperial Crown, the plaque or shield being of silver gilt for the titles of "Dewan, Sardar, Khan, Rai and Rao Bahadur, and of silver for the titles of "Khan, Rai, and Rao Sahib" (2) The badge shall be worn suspended round the neck by a ribbon of one inch and a half in width, which shall be light blue with a dark blue border, for the titles of "Khan, Rai and Rao Bahadur light red with a dark red border, and for the titles of "Khan, Rai and Rao Sahib dark blue with light blue border  
**Press Note** issued in November, 1911, state—The Government of India have recently had under consideration the question of the position in which **minutaries** of Indian titles should be worn, and have decided that they should be worn on the left breast fastened by a brooch, and not suspended round the neck by a ribbon as prescribed in the case of the Badge itself. When the **minutaries** are worn in conjunction with other decorations, they should be placed immediately after the Kaiser-i-Hind Medal.  
**Indian Distinguished Service Medal**—This medal was instituted on June 28th, 1907, by an Army Order published in Simla as a reward for both commissioned and non-commissioned officers of the regular and other forces in India. It bears on the obverse the bust of King Edward VII, and on the reverse a laurel wreath encircling the words **For Distinguished Service**. This

medal, 1 1/2 inches in diameter is ordered to be worn immediately to the right of all war medals awarded by the Viceroy of India

**Indian Order of Merit.**—This reward of valour was instituted by the H. E. I. Co. in 1877, to reward personal bravery without any reference to length of service or good conduct. It is divided into three classes and is awarded to native officers and men for distinguished conduct in the field. On the advancement from one class to another the star is surrendered to the Government and the superior class substituted but in the event of the death or retirement of the recipient his relatives retain the decoration. The order carries with it an increase of one-third in the pay of the recipient, and in the event of his death the allowance is continued to his widow for three years. The First Class consists of a star of light points, 1 1/2 in in diameter having in the centre a ground of dark-blue enamel bearing crossed swords in gold, within a gold circle, and the inscription Reward of Valour, the whole being surmounted by two wreaths of laurel in gold. The Second Class is a star of silver with the wreaths of laurel in gold, and the Third Class entirely of silver. The decoration is suspended from a simple loop and bar from a dark-blue ribbon 1 1/2 in in width with red edges bearing a gold or silver buckle according to class.

**Order of British India.**—This order was instituted at the same time as the Order of Merit, to reward native commissioned officers for long and faithful service in the Indian Army. Since 1878, however, any person European or native, holding a commission in a native regiment became eligible for admission to the Order without reference to creed or colour.

## THE COST OF FAMINE

In the section on Famine (q v) the whole policy of the Government of India towards the relief of distress is sketched out and the broad results indicated. They are revealed as great. The Public Works Department, the civil authorities, and district boards arranged for the carrying out of numerous projects with famine labour. These comprised construction of roads, tanks and irrigation works and the reclamation of ravine land—all works of undoubted utility. It was given principally to persons in the vicinity of the famine, the famine was the extreme scarcity of food which was met chiefly by concession rates for the carrying of foodstuffs on railways and the supply of food from the forests. Much good work was done by non-official efforts and a charitable fund was raised to the amount of £27,124. The total cost of the famine to Government is estimated at £520,000, as against £2,130,000 in 1907-08. Good rains in July and September 1914 finally relieved the situation and ensured a good harvest crop.

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# Laws and the Administration of Justice.

## European British Subjects

Whilst the substantive criminal law is the same for all classes, certain distinctions of procedure have always been maintained in regard to subjects. Until 1872 European British subjects could only be tried or punished by one of the High Courts. It was then enacted that European British subjects should be liable to be tried for any offences by magistrates of the highest class, who were also justices of the peace, and by judges of the Sessions Courts, but it was necessary in both cases that the magistrate or judge should himself be a European British subject. In 1883 the Government of India announced that they had decided to settle the question of jurisdiction over European subjects in such a way as to remove from the disqualification which is based merely on race code at once and completely every judicial distinction. This decision, embodied in the Herbert Bill, aroused a storm of indignation which is still remembered. The controversy ended in a compromise which is thus summarised by Sir John Strachey ("India"), "The controversy ended with the virtual, though not avowed, abandonment of the measure proposed by the Government. Act III of 1884, by which the law previously in force was amended, cannot be said to have diminished the privileges of European British subjects charged with offences, and it left their position as exceptional as before. The general disqualification of native judges and magistrates remains, but if a native of India be appointed to the post of district magistrate or sessions judge, his powers in regard to jurisdiction over European British subjects are the same as those of an Englishman holding the same office. This provision however is subject to the condition that every European British subject brought for trial before the district magistrate or sessions judge has the right, however trial be the charge, to claim to be tried by a jury of which not less than half the number shall be Europeans or Americans. Whilst this change was made in the powers of district magistrates, the law in regard to other magistrates remained unaltered." Since 1886 no distinctions of race have been recognised in the civil courts throughout India.

## High Courts

The highest legal tribunals in India are the High Courts of Judicature. These were constituted by the Indian High Courts Act of 1861 for Bengal, Bombay and Madras, and later for the United Provinces, superseding the old supreme and Sudder Courts. The judges are appointed by the Crown, they hold office during the pleasure of the Sovereign, at least one-third of their number are barristers, one-third are recruited from the judicial branch of the Indian Civil Service, the remaining places being available for the appointment of Indian lawyers. Trial by jury is the rule in original criminal cases before the High Courts, but juries are never employed in civil suits in India. For other parts of India High Courts have been formed under other names, the chief

The indigenous law of India is personal and divisible with reference to the two great classes of the population, Hindu and Mohammedan. Both systems claim divine origin and are inextricably interwoven with religion, and each exists in combination with a law based on custom. At first the tendency of the English and on the establishment of the Supreme Court, and the advent of English lawyers as judges, they proceeded to apply it to Europeans and Indians alike. This error was rectified by the Declaratory Act of 1780, by which Parliament declared that as against a Mohammedan the laws and customs of Islam should be applied. The rules of the Shastras and the Koran have been in some cases altered and relaxed. Instances can be found in the Bengal Sati Regulation Act of 1829, the Indian Slavery Act, 1843, the Hindu Widows' Remarriage Act, 1856, and the Caste Disabilities Removal Act of 1850, the other Acts and Codes. To quote the Imperial Gazetteer, "A certain number of the older English statutes and the English common law are to a limited extent still in force in the Presidency Towns as applicable to Europeans, while much of the old Hindu and Mohammedan law is everywhere personal to their native fellow subjects, but apart from these, and from the customary law, which is as far as possible recognised by the Courts, the law of British India is the creation of statutory enactments made for it either at Westminster or by the authorities in India to whom the necessary law-giving functions have from time to time been delegated."

## Codification

Before the transfer of India to the Crown the law was in a state of great confusion. Sir Henry Cunningham described it as "hopelessly untidy, entangled and confusing." The first steps toward general codification were taken in 1833, when a Commission was appointed, of which Lord Macaulay was the moving spirit, to prepare a penal code. Twenty-two years elapsed before it became law, during which period it underwent revision from his successors in the Law Membership, and especially by Sir Barnes Peacock, the last Chief Justice of the Supreme Court of Calcutta. The Penal Code, which became law in 1860, was followed in 1861 by a Code of Criminal Procedure. Substantially the whole criminal law of British India is contained in these two Codes. One of the most eminent lawyers who ever came to India, Sir James Stephen, said the criminal law of England and Ireland all arranged and modelled in some few particulars (they are surprisingly few) to suit the circumstances of British India. It is practically impossible to misunderstand the code." The rules of Civil Procedure have been embodied in the Code of Civil Procedure. The Indian Penal Code has from time to time been amended. The Code of Civil Procedure was remodelled in 1908 and the Code of Criminal Procedure in 1933. These Codes are now in force



difference being that they derive their authority from the Government of India, not from Parliament. In the Punjab and Burma there are Chief Courts, with three or more judges, in the other provinces the chief appellate authority is an officer called the Judicial Commissioner. In the Judicial Commission is termed Judge or the Sudder Court and has two colleagues.

The High Courts are the Courts of appeal from the superior courts in the districts, criminal and civil, and their decisions are final. Appeal in cases in which an appeal lies to His Majesty in Council and is heard by the Judicial Committee of the Privy Council in England. The High Courts exercise supervision over all the subordinate courts. Returns are regularly sent to them at short intervals and the High Courts are able, by examining the returns, by finding out proceedings, and by calling for explanation as well as from the cases that come before them in appeal to keep themselves to some extent acquainted with the manner in which the courts generally are discharging their duties.

### Lower Courts

The Code of Criminal Procedure provides for the constitution of inferior criminal courts divided into sessions and courts of magistrates. Every province, outside the Presidency towns, is divided into sessions divisions, consisting of one or more districts, and every sessions judge, with assistance if need be The sessions courts take the place of the English Assizes, and are competent to try all accused persons duly committed, and to inflict any punishment authorised by law, but sentences of death are subject to confirmation by the highest court of criminal appeal in the province. 'Magistrates' courts are of three classes with descending powers. Provision is made and largely utilised in the towns, for the appointment of honorary magistrates, in the Presidency towns Presidency magistrates, local with magisterial cases and benches of Justices of the Peace or honorary magistrates dispose of the less important cases.

That before courts of session are, either with assessors or juries, assessors assist, but to do not bind the judge by their opinions, on juries the opinion of the majority prevails. It is accepted by the presiding judge. The Indian law allows considerable latitude of appeal. The prerogative of mercy is exercised by the Government General-in-Council and the Local Government concerned without prejudice to the superior power of the Crown.

The constitution and jurisdiction of the interior civil courts varies. Broadly speaking, one district and sessions judge is appointed for each district as District Judge he presides in its principal civil court of original jurisdiction, his functions as Sessions Judge have been described. For these posts members of the Indian Civil Service are mainly selected though some appointments are made from the Provincial Service. Next come the Subordinate Judges and Justices, the extent of whose original jurisdiction varies in different parts of India. The civil courts, below the grade of District

Judges, are almost invariably presided over by Indians. There are in addition a number of Courts of Small Causes, with jurisdiction to try money suits up to Rs 500. In the Presidency towns, where the Chartered High Courts have original jurisdiction, small Cause Courts dispose of money suits up to Rs 2,000. As in Calcutta, Bombay and Madras have jurisdiction in the Presidency towns. In the municipal similar powers were conferred on the District Courts by the Insolvency Act of 1906. Coroners are appointed only for the Presidency Towns of Calcutta and Bombay. Elsewhere their duties are discharged by the ordinary staff of magistrates and police officers unaided by jurors.

### Legal Practitioners

Legal practitioners in India are divided into Barristers-at-Law, Advocates of the High Court, and Attorneys (Solicitors) of High Courts, Pleaders, Mukhtars and revenue agents. Barristers and Advocates are admitted by each High Court to practise in it and its subordinate courts, and they alone are admitted to practise on the original side or some of the chartered High Courts. Valis are persons duly qualified who are admitted to practise on the appellate side of the chartered High Courts and in the Courts subordinate to the High Courts. Attorneys are required to qualify before admission to practise in much the same way as in England. The rule that a solicitor must instruct counsel prevails only on the original side of certain of the High Courts. Pleaders practise in the subordinate courts in accordance with rules framed by the High Courts.

### Organisation of the Bar

At Calcutta, Madras and Bombay there is a Bar Committee presided over, *ex officio*, by the Advocate-General. This body is elected by and its functions are to watch the interests of the barristers practising in each High Court, Advocate-General. In the larger Districts and in similar Bar Committees exist, but the electoral franchise is extended to include the village or village, and the president is elected the a more practising member of the Bar or the Government Advocate. In the larger Districts and in similar Courts, an organisation representing the Bar is usually to be found, and in the subordinate Courts, including the Revenue Court, similar machinery is generally in use. Pending an opportunity of detailed inquiries must submit these general descriptions must submit.

### Composition of the Bar

A considerable change is occurring in the composition of the Indian Bar. The following extract from an important article in the *Times* (May 25, 1914) indicates the character and incidence of this development. During the last forty years, a striking change has taken place in the professional class. The bulk of Indian lawyers has largely passed from British to Indian hands, while, at the same time, the profession has grown to an enormous extent. One typical illustration may be quoted. At present to the Bombay High Court in 1871

## Law Reports

The Indian Law Reports are published in four series—Calcutta, Madras, Bombay, and Allahabad, under the authority of the Governor-General in Council. They contain cases determined by the High Court and by the Judicial Committee on appeal from the particular High Court. These appeals raise questions of very great importance, and the Council or Law Reporting for England and Wales show their appreciation by printing the Indian Appeals in a separate volume, and have also compiled a digest of Indian Appeals covering the period 1874-1898. The other Provinces and States either on the Judiciary or the State

## Legislative Power

The supreme power of Parliament to legislate for the whole of India cannot be questioned. In practice, however, this power is little used, there being a majority of officials on the Imperial Legislative Council—a majority deliberately reserved in the India Councils Act of 1909—the Secretary of State is able to impose his will on the Government of India and to secure the passage of any measure he may frame, regardless of the opinion of the Indian authorities. Legislative Councils have been established both for the whole of India and for the principal provinces. Their constitution and functions are fully described in detailing the powers of the Imperial and Provincial Councils (q.v.). To meet emergencies the Governor-General is vested with the power of issuing ordinances, having the same force as Acts of the Legislature, but they can remain in force for only six months. The power is very little used. The Governor-General-in-Council is also empowered to make regulations, having all the cogency of Acts, for the more backward parts of the country, the object being to bar the operation of the general law and permit the application of certain enactments only.

were 23 solicitors, of whom 10 were Indian and 7 were English, and 24 advocates, of whom 7 were Indian and 17 English. In 1911, attached to the same High Court, there were 150 solicitors, of whom more than 130 were Indian and the remainder English, and 250 advocates, of whom 16 only were English and the remainder Indian."

## Law Officers

The Government of India has its own law colleague in the Legal Member of Council. All Government measures are drafted in this department. Outside the Council the principal law officer of the Government of India is the Advocate-General of Bengal, who is appointed by the Crown, is the leader of the local Bar, and is always nominated a member of the Provincial Legislative Council. In Calcutta he is assisted by the Standing Counsel and the Government Solicitor. There are Advocate-General and Government Solicitors for Bombay and Madras, and in Bombay there is attached to the Secretariat a Legal Member and an Assistant Legal Member, drawn from the Judicial Branch of the Indian Civil Service. The Government of Bengal consults the Bengal Advocate-General, the Standing Counsel and the Government Solicitor, and has besides a Legal Member, a Branch (a practicing barrister), the United Provinces are equipped with a civilian Legal Member and professional lawyers as Government Advocate and Assistant Government Advocate, the Punjab has a Legal Member, Government Advocate and a Junior Government Advocate, and Burma a Government Advocate, besides a Secretary to the Local Legislative Council. Sheriffs are attached to the High Courts of Calcutta, Madras and Bombay. They are appointed by Government, selected from non-officials of standing, the detailed work being done by deputy sheriffs, who are officers of the Court.

## Bengal Judicial Department

Chief Justice  
Pursue Judge

Ditto

Ditto

Ditto

Ditto

Ditto

Ditto

Ditto

Ditto

Ditto

Ditto

Ditto

Ditto

Ditto

Ditto

Ditto

Ditto

Ditto

Ditto

Ditto

Ditto

Sanderson Sir Lancelot  
Leamon, The Hon'ble Mr William, 10 S  
Woodroffe, The Hon'ble Mr John George, M.A., Bar-at-Law  
Mukherji, The Hon'ble Sir Ashutosh, Kt., C.S.I., M.A., D.L.  
Richardson, The Hon'ble Mr Thomas William, 10 S,  
Bar-at-Law  
Holmwood, The Hon'ble Mr Herbert, 10 S  
Chitty, The Hon'ble Mr Charles William, Bar-at-Law  
Fletcher, The Hon'ble Mr Ernest Edward, Bar-at-Law  
Shart-ud-din, The Hon'ble Mr Saiyid, Bar-at-Law  
Coxe, The Hon'ble Mr Henry Keyneil Halled, 10 S  
Chatterji, The Hon'ble Mr Digamber, M.A., B.L.  
Chatterji, The Hon'ble Mr Nihal Ranjan, M.A., B.L.  
Chauhan, The Hon'ble Mr Asutosh, Bar-at-Law  
Imam, The Hon'ble Mr Saiyid Hassan, Bar-at-Law  
Becheroff, The Hon'ble Mr Charles Porten, 10 S  
Mullick, The Hon'ble Mr Basanta Kumar, 10 S  
Chapman, The Hon'ble Mr William Ewart, Bar-at-Law  
Greaves, The Hon'ble Mr Edmund Pelly, 10 S  
Walmesley, The Hon'ble Mr Hugh, 10 S

(Temporary, Additional),  
Ditto  
Ditto  
Ditto  
Ditto

Bengal Judicial Department—contd

Advocate-General  
Standing Counsel  
Government Solicitor  
Superintendent and Remembrancer of Legal Affairs  
Deputy Superintendent and Remembrancer of Legal Affairs  
Senior Government Pleader  
Public Prosecutor, Calcutta  
Registrar, Keeper of Records, Taxing Officer, Accountant-General, and Secretary, etc., Original Jurisdiction  
Deputy Registrar, Temporary Registrar in Insolvency  
Master and Official Referee  
Assistant Registrar (Offg Dy Regstr)  
Clerk of the Crown for Criminal Sessions.  
Secretary to the Chief Justice and Head Clerk, Decree Department (sub *pro tem*)  
Registrar and Taxing Officer, Appellate Jurisdiction  
Assistant Registrar  
Official Receiver, sub *pro tem*  
Coroner of Calcutta  
Offg Editor of Law Reports  
Deputy Registrar

Kanungo, The Hon'ble Mr George Harry Blait, K O,  
LL B Bar at Law  
Mitra, The Hon'ble Mr Bindu Chandra, Bar at-Law  
Newbold, The Hon'ble Mr B B  
Orr, John William, Bar at-Law  
Rama Chaitra Mitra  
Hume, J F  
McClintock, James Herbert  
Kenney, Maurice  
Raijoo Mohan Chatterji, Bar at-Law  
Hyper, George  
Bourne, William Augustus, Bar at-Law  
Hem Chandra Mitra  
Vitch, Harold Massey, B A, I C S  
Cousnell, Frank Hartman  
Grey, Charles Edward, Bar at-Law  
Honnighe, K K Shelly, Bar at Law  
Dobbin, F K, Bar at-Law  
Base B N, Bar at-Law  
Waltie, Thomas John

Bombay Judicial Department

Scott, The Hon'ble Sir Basil, Kt, M A, Bar at-Law  
Shah, The Hon'ble Mr Lallubhai Asharam, M.A., LL.B

Batchelor, The Hon'ble Sir Stanley Lockhart, Kt, B A, I C S  
Davar, The Hon'ble Sir Dinsha Dhanjibhai, Kt, Bar at-Law  
Bhamam, The Hon'ble Mr Frank Clement Offhey, I C S  
Hicaton, The Hon'ble Sir Joseph John, I C S  
McLeod, The Hon'ble Mr Norman Cranston, B A, Bar at-Law

Jarvis, M R, The Hon'ble Mr  
Franch, George Douglas  
Nasim, Joseph, M A, LL B, Bar at-Law, I C S  
Nicholson, Eustace Ferrers

Slater, John Sanders, B A, Bar at-Law  
Abdell Muhammad Ali Kaziji, B A, LL B, Bar at-Law  
Jijibhai Edaji Modi, Bar at-Law

Vasant Rao Anand Rao Dabholkar  
Alison, Frederick William, B A, I C S  
Nasirwanji Dhanubhai Gharia, B A, LL B

Advocate General, sub *pro tem*  
Remembrancer of Legal Affairs  
Assistant Remembrancer of Legal Affairs  
Government Solicitor and Public Prosecutor  
Administrator-General and Official Trustee  
Protionotary, Testamentary and Admiralty Registrar  
Master and Registrar in Equity and Commissioners for taking Accounts and Local Investigations, and Taxing Officer  
Sheriff  
Deputy Registrar Appellate Side  
Deputy Registrar and Sealer, Appellate Side

Coroner (On leave)

**Madras Judicial Department**

Assam Judicial Department

\* Bihar and Orissa Judicial Department.

Chief Justice	Sir Lindoch Woodroffe, The Hon'ble Sir John George, Kt., M.A., B.C.L.
Puisne Judge	Madhusri The Hon'ble Sir Ashutosh, Kt., C.S.I., M.A., D.L.
	Holmwood, The Hon'ble Mr. Hartlett, J.C.S.
Ditto	Chatterji, The Hon'ble Mr. Charles William, Barrister at Law
Ditto	Law
	Chatterji The Hon'ble Mr. Earnest Edward, Barrister at Law
Ditto	Chatterji and the Hon'ble Mr. Sayid, Barrister at Law
Ditto	Chatterji, The Hon'ble Mr. Henry Alexander Holld, J.C.S.
Ditto	Chatterji, The Hon'ble Mr. Digambar, M.A., B.L.

\* Bihar and Orissa are to be separated from the Bengal Judicial Department in 1916 and to have their own High Court at Patna.

Bihar and Orissa Judicial Department—contd.

[illegible]

Burma Judicial Department.

[illegible]

Central Provinces, Judicial Department.

Deputy Registrar Registrar Second Additional Judicial Commissioner. First Additional Judicial Commissioner.	Judicial Commissioner
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Draft, Prothonotary, Sir H V, M A L N, Bar at Law,  
 Batten, J K ICS •  
 Strayson, H J, C I I, V D, V D C, Bar at Law  
 Nocton & ICS  
 Prand, K ICS

**N-W Frontier Province, Judicial Department**

Judicial Commissioner	Barton, W P, C I E, I C S
Registrar	Muhammad Yakub, Muzi

**Punjab Judicial Department.**

Chief Judge	Johnstone, The Hon'ble Mr Donald Campbell, I C S
Judge	Rattigan, The Hon'ble Mr Henry Adolphus Byden, B A, Bar-at-Law

Judge	Shah Din, The Hon'ble Mian Muhammad, Bar-at-Law
Judge	Smith, The Hon'ble Mr H Scott, I C S

Judge	Cherie, The Hon'ble Mr William, I C S
First Temporary Additional (Judge)	Shad Lil, The Hon'ble Mr Rai Bahadur, Bar-at-Law

Second Temporary Additional (Judge)	Le Rossignol, The Hon Mr Walter Aubin, I C S
Legal Remembrancer	Gracey, S W, B A, I C S

Government Advocate	Petman, Charles Bevan, B A, Bar-at-Law
Registrar	Campbell, Archibald, B A, I C S

**United Provinces, Judicial Department**

Chief Justice	Richards, The Hon'ble Sir Henry George, Kt, Bar-at-Law, K C
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Puisne Judge	Knox, The Hon'ble Sir George Edward, Kt, L D, I C S
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Ditto	Banarji, The Hon'ble Sir Pramada Charan, Kt, B A, B L
Ditto	Riggott, The Hon'ble Mr Theodore Caro, I C S

Ditto	Tudball, The Hon'ble Mr William, I C S
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Ditto	Chandler, The Hon'ble Mr Edward Maynard Des
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Ditto	Champs, Bar-at-Law
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Ditto	Radh, The Hon'ble Mr Muhammad, Bar-at-Law
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Registrar	Murray, George Murray, I C S
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Legal Remembrancer	Ashworth, The Hon'ble Mr E H, I C S
Government Advocate	Ryves, Alfred Edward, B A, Bar-at-Law

Law Reporter and Secretary, Legislative Council	Porter, Wilfred King, Bar-at-Law
Government Pleader	Lall Mohan Banarji

**COURT OF JUDICIAL COMMISSIONER OF OUDH—LUCKNOW**

Judicial Commissioner	Linday, Benjamin, I C S
First Additional Judicial Commissioner	Stuart, Louis, I C S
Second Additional Judicial Commissioner	Rai Kanhaiya Lal, Bahadur
Temporary Registrar	Cordaux, C H, Bar-at-Law
Government Pleader	Nagendra Nath Ghosal

Province	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308</
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\* Details not given of 42 Bombyx suits in 1906, 56 Madras suits in 1900, 90 in 1907, 71 in 1908, 71 in 1909 and 64 suits in 1912, and 370 Theenai suits in 1900.

THE INDIAN POLICE.

The Indian Government employ 192,791 men in the ranks of the Indian Police, who are controlled by 749 Gazetted European Officers. In large cities, the Force is concentrated and under direct European control, in the mofussil the men are scattered throughout each District and located at various Outposts and Police Stations. The smallest unit for administrative purposes is the Outpost which generally consists of 3 or 4 Constables under the control of a Head Constable. Outpost Police are maintained to patrol roads and villages and to report all matters of local interest to their superior, the Sub-Inspector. They have no powers to investigate offences and are a rural force. In the period when the country was in a disturbed state and small bodies of Police were required to keep open communications and afford protection against the raids of dacoits. It is an open question whether they are now of much use. Each Outpost is under a Police Station which is controlled by an officer known as a Sub-Inspector.

**Distribution of Police**—The area of a Police Station varies according to local conditions. The latest figures available are —

Average number of Regular Civil Police per 10,000 of Population	Average area per Police Station
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	Square miles
Bengal *	138
Eastern Bengal and Assam	358
United Provinces	127
Punjab	210
North West Frontier Province	179
(Central Provinces and Berar	275
Burma *	500
Madras	106
Bombay *	290
	129

\* Excluding the towns of Calcutta, Bombay and Rangoon. The figures include the Railway police, but not Military police.

Organisation of Police

The Police Station Officer (the Sub-Inspector) is responsible for the investigation of all considerable crimes, that is to say, all offences in which the Police can arrest without a warrant from a Magistrate, which occur within his jurisdiction. He is also held responsible for the maintenance of the public peace and the prevention of crime. From the point of view of the Indian Government, he is the most important Police Officer in the District and may rightly be considered the backbone of the Force.

Superior to the Sub-Inspector is the Inspector who holds charge of a circle containing 4 or 5 Police Stations. His duties are chiefly those of supervision and inspection. He does not ordinarily interfere in the investigation of criminal cases, the conduct of his subordinates under this necessity.

The Inspector is usually a selected and experienced Sub-Inspector. Each District contains 3 or 4 Circles, and in the case of large Districts the number of Circles may be increased. The Inspector is the Criminal Investigation Department, which is under the control of a specially selected European Officer of the rank and grade of a District.

Separate but recruited from the District Force is the Provincial Police. Government for the administration of the General who is responsible to the Local Government for the administration of the ranks of the Superintendent. At the head of the Inspector-General, an officer selected from the ranks of the Superintendent by a Deputy Inspector-General, who is administered by a Deputy Inspector-General, for the internal administration of his Force. Eight or ten Districts form a Range administered by a Deputy Inspector-General, and, to his Deputy Inspector-General and Inspector-General, for the internal administration of his Force. Eight or ten Districts form a Range administered by a Deputy Inspector-General, and, to his Deputy Inspector-General, for the internal administration of his Force. Eight or ten Districts form a Range administered by a Deputy Inspector-General, and, to his Deputy Inspector-General, for the internal administration of his Force.



standing of a Deputy Inspector General The Criminal Investigation Department, usually called the C I D, is mainly concerned with political inquiries, seditious cases and crimes with ramifications over more than one District or which are considered too important to leave in the hands of the District Police. It is a small force of Sub-Inspectors and Inspectors who have shown their ability and intelligence when working in the most arduous and intelligent Provance a local Scotland Yard

The larger Cities of Calcutta, Bombay, and Madras have their own Police Force, independent of the Inspector-General of Police, and under the control of a Commissioner and 2 or more Deputies. The latter are selected Superintendents who have learnt their work in the Provance for Police purposes, the City area is divided into divisions under the control of non-gazetted European officers, styled Superintendents but not to be confused with District Superintendents. Each division contains a number of Police Stations controlled as in the Provance, by Inspectors and Sub-Inspectors. A comparatively small number of Europeans are recruited in cities from British regiments for the control of traffic. They have no powers of investigation

The Supreme Government at Delhi and Simla keeps in touch with the Provincial Police by means of the Director of Criminal Intelligence and his Staff. The latter do not interfere in the Local Administration and are mainly concerned with the publication of information regarding international criminals, international crime and Political inquiries in which the Supreme Government is interested

**Recruitment**—The constable is enlisted locally. Certain castes are excluded from service and the formation of cliques by filling up the force from any particular caste or local character and pass a medical test. They must be above certain standards of physical development. The constable rises by merit to the rank of Head Constable and, prior to the Police Commission, could rise to the highest Indian subordinate appointments. Since 1906 his chances of promotion have been greatly curtailed, this has certainly lowered the standard coming forward for service in the force in the lower ranks.

The Sub-Inspector, until 1906, was a selected Head Constable, but Lord Curzon's Commission laid down that Sub-Inspectors should be recruited direct from a socially better class of Indians. In most Provinces, slightly per cent of the Sub-Inspectors are selected by nomination, trained for a year or 18 months at a Central Police School, and, after examination, appointed direct to Police Stations to learn their work by actual experience. It is too early to judge this system by results, but it has no doubt great disadvantages and undetected crime in India is increasing rapidly.

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An Inspector is generally a selected Sub-Inspector. Direct nomination is the exception not the rule

The Deputy Superintendent, a new class of officer, instituted on the recommendation of the Commission, is an Indian gazetted officer and is the native Assistant to the District Superintendent of Police. He is either selected by special promotion from the ranks of the Inspectors or is nominated direct, after a course at the Central Police School.

Prior to 1893, the gazetted rank of the force were filled either by nomination or by regimental officers seconded from the Army for certain periods. In 1893, this system was abandoned and Assistant Superintendent were recruited in India they were placed on probation until they had passed their examinations in the vernacular, in law, and in riding and drill. The establishment of Police Training schools in 1906 has done much to improve the training of the Police Probationers, and selection by examination has given Government a better educated officer but open competition does not reveal the best administrators and should be tempered, as in the Army by selection.

**Pay**—The monthly salaries drawn by each grade of Police Officer are as follows:—

A constable draws from	Rs 10 to 12
A Head Constable draws	" 15 to 20
A Sub-Inspector from	" 50 to 100
An Inspector from	" 150 to 250
Deputy Superintendents from	" 250 to 500
Assistants from	" 300 to 500
District Superintendents of Police from	Rs 700 to 1,500
Deputy Inspectors General	Rs 1,500 to 3,000
Inspectors General from	Rs 2,000 to 3,000

**Internal Administration**—The District Force is divided into 2 Branches—Armed and unarmed. The unarmed branch are armed and drilled and taught to shoot after controlled on a military basis. They are organized into companies, they are maintained and armed and prisoners and operating against dangerous gangs of dacoits. The armed branch consists of guarding Prisons, a central force of 100 men, and the district force of 100 men. The district force is divided into 2 Branches—Armed and unarmed. The unarmed branch are armed and drilled and taught to shoot after controlled on a military basis. They are organized into companies, they are maintained and armed and prisoners and operating against dangerous gangs of dacoits. The armed branch consists of guarding Prisons, a central force of 100 men, and the district force of 100 men.

The appointments of Commissioner of Police, Calcutta, Bombay, and Madras and all Provincial Inspectors-General may be held by a member of the Indian Civil Service. If no Police Officer is found suitable for such appointments, the District Force is divided into 2 Branches—Armed and unarmed. The unarmed branch are armed and drilled and taught to shoot after controlled on a military basis. They are organized into companies, they are maintained and armed and prisoners and operating against dangerous gangs of dacoits. The armed branch consists of guarding Prisons, a central force of 100 men, and the district force of 100 men.

## 3 2

The undesirability of attaching undue importance to statistical results as a test of the merits of police work was a point upon which considerable stress was laid by the Indian Police Commission, who referred to the evils likely to result from the prevalence among subordinate officers of an impression that the advancement of any officer would depend upon his being able to show a high ratio of convictions, both in cases and to persons arrested, and not a low ratio of crime. The objection applies more particularly to the use of statistics for small areas, but they cannot properly be used as a basis of comparison even for larger areas, with any amount of accuracy, for the differences between the police work, and, with it may be added, they can at the best indicate only very imperfectly the degree of success, in which the police carry out that important branch of their duties, which consists in the prevention of crime. These considerations have been emphasized by me in my recent orders of the Government of India. Subject to these observations, the figures below may be given as some indication of the volume of work falling upon the police, and of the wide differences between the conditions and the statistical results in different provinces. —

Persons whose cases were disposed of		Number of Persons under Trial	Number of Offences reported	Administrations
Persons remaining under Trial at the end of the Year	Died, Escaped, Transferred to another Province	Discharged or Acquitted	Convicted	Committed or Referred

Province	1911	1910	1909	1907	1906	1905	1904	1903
Bengal	333,309	298,143	93,576	192,246	2,565	140	9,006	4,411
Bihar and Orissa	112,917	107,650	50,609	50,926	1,615	97	5,920	14,253
United Provinces	222,817	316,365	187,009	118,444	4,791	200	5,920	14,253
Punjab (including Delhi)	231,253	310,121	218,534	75,342	1,751	241	14,253	14,253
North-West Frontier Province	25,593	38,678	22,807	14,498	485	17	871	871
Burmah	108,440	188,941	70,416	106,083	2,144	2,339	7,950	7,950
Central Provinces and Berar	99,820	56,880	32,193	19,810	1,499	51	3,327	3,327
Assam	40,862	33,754	16,268	14,784	484	35	2,185	2,185
Nagpur-Vidhar	10,698	12,969	4,292	7,968	84	625	625	625
Coorg	2,480	3,037	1,741	1,038	11	7	240	240
Madrass	53,167	502,155	236,965	246,553	4,178	141	14,318	14,318
Bombay	172,103	253,315	112,842	126,507	2,127	828	10,862	10,862
British Baluchistan	5,786	10,796	0,405	3,008	103	1,190	1,190	1,190
Total, 1912	1,659,254	2,132,813	1,053,657	977,267	21,650	4,313	75,765	75,765
1911	1,502,995	1,960,679	966,783	897,786	21,173	3,906	70,862	70,862
1910	1,447,752	1,884,951	922,379	872,298	21,029	4,439	64,677	64,677
1909	1,421,350	1,856,219	914,500	854,658	22,174	3,349	61,502	61,502
1908	1,412,217	1,844,207	897,462	860,065	24,535	3,425	58,496	58,496
1907	1,411,653	1,816,827	880,706	851,097	21,296	3,505	60,223	60,223
1906	1,404,777	1,805,707	864,493	860,486	22,776	3,011	54,041	54,041
1905	1,385,344	1,767,134	823,185	862,398	21,293	6,429	53,825	53,825
1904	1,370,002	1,758,411	830,019	843,369	20,144	7,346	57,531	57,531
1903	1,329,682	1,700,035	781,347	827,810	19,840	5,356	67,685	67,685

\* Including some cuts of cattle theft

Barisal	1,710	4,430	1,082	5,007	14,763	2,312	11	21,221	7,171	170,021	25,200	19,181	20,175
Chittagong	1,710	4,430	1,082	5,007	14,763	2,312	11	21,221	7,171	170,021	25,200	19,181	20,175
Subar	1,710	4,430	1,082	5,007	14,763	2,312	11	21,221	7,171	170,021	25,200	19,181	20,175
United Provinces	1,710	4,430	1,082	5,007	14,763	2,312	11	21,221	7,171	170,021	25,200	19,181	20,175
Punjab	1,710	4,430	1,082	5,007	14,763	2,312	11	21,221	7,171	170,021	25,200	19,181	20,175
Dehra	1,710	4,430	1,082	5,007	14,763	2,312	11	21,221	7,171	170,021	25,200	19,181	20,175
West Frontier Pro-	1,710	4,430	1,082	5,007	14,763	2,312	11	21,221	7,171	170,021	25,200	19,181	20,175
Vindhya	1,710	4,430	1,082	5,007	14,763	2,312	11	21,221	7,171	170,021	25,200	19,181	20,175
Burma	1,710	4,430	1,082	5,007	14,763	2,312	11	21,221	7,171	170,021	25,200	19,181	20,175
Kancon	1,710	4,430	1,082	5,007	14,763	2,312	11	21,221	7,171	170,021	25,200	19,181	20,175
Central Province and	1,710	4,430	1,082	5,007	14,763	2,312	11	21,221	7,171	170,021	25,200	19,181	20,175
Herat	1,710	4,430	1,082	5,007	14,763	2,312	11	21,221	7,171	170,021	25,200	19,181	20,175
Assam	1,710	4,430	1,082	5,007	14,763	2,312	11	21,221	7,171	170,021	25,200	19,181	20,175
Coorg	1,710	4,430	1,082	5,007	14,763	2,312	11	21,221	7,171	170,021	25,200	19,181	20,175
Madras	1,710	4,430	1,082	5,007	14,763	2,312	11	21,221	7,171	170,021	25,200	19,181	20,175
Bombay	1,710	4,430	1,082	5,007	14,763	2,312	11	21,221	7,171	170,021	25,200	19,181	20,175
Malabar	1,710	4,430	1,082	5,007	14,763	2,312	11	21,221	7,171	170,021	25,200	19,181	20,175
Goa	1,710	4,430	1,082	5,007	14,763	2,312	11	21,221	7,171	170,021	25,200	19,181	20,175
Portuguese	1,710	4,430	1,082	5,007	14,763	2,312	11	21,221	7,171	170,021	25,200	19,181	20,175
Other	1,710	4,430	1,082	5,007	14,763	2,312	11	21,221	7,171	170,021	25,200	19,181	20,175
Malta	1,710	4,430	1,082	5,007	14,763	2,312	11	21,221	7,171	170,021	25,200	19,181	20,175
Other Islands	1,710	4,430	1,082	5,007	14,763	2,312	11	21,221	7,171	170,021	25,200	19,181	20,175
<b>TOTAL, 1912</b>	<b>12,414</b>	<b>4,430</b>	<b>1,082</b>	<b>5,007</b>	<b>14,763</b>	<b>2,312</b>	<b>11</b>	<b>21,221</b>	<b>7,171</b>	<b>170,021</b>	<b>25,200</b>	<b>19,181</b>	<b>20,175</b>
<b>1911</b>	<b>11,670</b>	<b>4,430</b>	<b>1,082</b>	<b>5,007</b>	<b>14,763</b>	<b>2,312</b>	<b>11</b>	<b>21,221</b>	<b>7,171</b>	<b>170,021</b>	<b>25,200</b>	<b>19,181</b>	<b>20,175</b>
<b>1910</b>	<b>11,700</b>	<b>4,430</b>	<b>1,082</b>	<b>5,007</b>	<b>14,763</b>	<b>2,312</b>	<b>11</b>	<b>21,221</b>	<b>7,171</b>	<b>170,021</b>	<b>25,200</b>	<b>19,181</b>	<b>20,175</b>
<b>1909</b>	<b>11,910</b>	<b>4,430</b>	<b>1,082</b>	<b>5,007</b>	<b>14,763</b>	<b>2,312</b>	<b>11</b>	<b>21,221</b>	<b>7,171</b>	<b>170,021</b>	<b>25,200</b>	<b>19,181</b>	<b>20,175</b>
<b>1908</b>	<b>12,411</b>	<b>4,430</b>	<b>1,082</b>	<b>5,007</b>	<b>14,763</b>	<b>2,312</b>	<b>11</b>	<b>21,221</b>	<b>7,171</b>	<b>170,021</b>	<b>25,200</b>	<b>19,181</b>	<b>20,175</b>
<b>1907</b>	<b>12,461</b>	<b>4,430</b>	<b>1,082</b>	<b>5,007</b>	<b>14,763</b>	<b>2,312</b>	<b>11</b>	<b>21,221</b>	<b>7,171</b>	<b>170,021</b>	<b>25,200</b>	<b>19,181</b>	<b>20,175</b>
<b>1906</b>	<b>12,380</b>	<b>4,430</b>	<b>1,082</b>	<b>5,007</b>	<b>14,763</b>	<b>2,312</b>	<b>11</b>	<b>21,221</b>	<b>7,171</b>	<b>170,021</b>	<b>25,200</b>	<b>19,181</b>	<b>20,175</b>
<b>1905</b>	<b>12,313</b>	<b>4,430</b>	<b>1,082</b>	<b>5,007</b>	<b>14,763</b>	<b>2,312</b>	<b>11</b>	<b>21,221</b>	<b>7,171</b>	<b>170,021</b>	<b>25,200</b>	<b>19,181</b>	<b>20,175</b>
<b>1904</b>	<b>14,830</b>	<b>4,430</b>	<b>1,082</b>	<b>5,007</b>	<b>14,763</b>	<b>2,312</b>	<b>11</b>	<b>21,221</b>	<b>7,171</b>	<b>170,021</b>	<b>25,200</b>	<b>19,181</b>	<b>20,175</b>
<b>1903</b>	<b>15,528</b>	<b>4,430</b>	<b>1,082</b>	<b>5,007</b>	<b>14,763</b>	<b>2,312</b>	<b>11</b>	<b>21,221</b>	<b>7,171</b>	<b>170,021</b>	<b>25,200</b>	<b>19,181</b>	<b>20,175</b>

LOTALS

Adm

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number of convicts were employed in excavating the Jhelum Canal in the Punjab. Within the walls prisoners are employed on jail service and repairs, and in workshops. The main principle laid down with regard to jail manufactures is that the work must be penal and industrial. The industries are on a large scale, manufactures employed being condemned, while care is taken that the jail shall not compete with local traders. As far as possible industries are adapted to the requirements of the consuming public departments, and printing, tent-making, and the manufacture of clothing are among the commonest employments. Schooling is confined to juveniles, the experiment of teaching adults has been tried, but literary instruction is unsuitable for the class of persons who fill an Indian jail.

The conduct of convicts in jail is generally good, and the number of desperate characters among them is small. Failure to perform the allotted task is by far the most common offence in a large majority of cases the punishment inflicted is one of those classed as "minor." Among the "major" punishments fetters take the first place. Corporal punishment is inflicted in relatively few cases and the number is steadily falling. Punishments were revised as the result of the Commission of 1889. Two notable punishments then abolished were shaving the heads of female prisoners and the stocks. The latter, which was apparently much prized in Bombay, was described by the Commission as inflicting exquisite torture. Punishments are now scheduled and graded into major and minor. The most difficult of all problems is the internal maintenance of order among the prisoners, for which purpose paid wardens and convict warders are employed. With this is bound up the question of a special class of well-behaved prisoners which was tried from 1905 onwards in the Thana Jail.

**Juvenile Prisoners**—As regards "youthful offenders," i.e., those below the age of 15—the law provides alternatives to imprisonment, and it is strictly enjoined that boys shall not be sent to jail when they can be dealt with otherwise. The alternatives are detention in a reformatory school for a period of from three to seven years, but not beyond the age of 18, discharge with probation, or delivery to the parent or guardian on the latter executing a bond to be responsible for the good behaviour of the culprit, and whipping by way of school discipline.

The question of the treatment of "young adult" prisoners has in recent years received much attention. Under the Prisons Act, prisoners below the age of 18 must be kept separate from older prisoners, but the recognition of the principle that an ordinary jail is not a fitting place for adolescents (other than youthful habituals) who are over 15, and therefore ineligible for admission to the reformatory school, has led Local Governments to consider schemes for going beyond this by treating young adults on the lines followed at Borstal, and considerable progress has been made in this direction. In 1903, a special class for selected juveniles and young adults was established at the Dhawar

The origin of all improvements in India in recent years was the Jail Commission of 1889. The report of the Commission, which consisted of only two members, both officials, serving under the Government of India, is very lengthy, and reviews the whole question of jail organization and administration in the minutest detail. In most matters the Commission's recommendations have been accepted and adopted by Local Governments, but in various matters, mainly of a minor character, their proposals have either been rejected or modified to suit local conditions, abandoned as unsuitable after careful experiment, or accepted in principle but postponed for the present as impossible.

The most important of all the recommendations of the Commission, the one that might in fact be described as the corner stone of their report, is that there should be in each Presidency three classes of jails in the first place, large central jails for convicts sentenced to more than one year's imprisonment, secondly, district jails at the head-quarters of districts, and, thirdly, subsidiary jails and lock-ups "for under-trial prisoners and convicts sentenced to short terms of imprisonment." The jail department in each province is under the control of an Inspector-General, he is generally an officer of the Indian Medical Service with jail experience, and the Superintendent of certain jails are usually recruited from the civil service. The district jail is under the charge of the civil surgeon, and is frequently inspected by the district magistrate. The staff of jailors and warders, and convict petty officers, medical officers. The executive staff consists of jailors and warders, and in all central and district jails one or more subordinate medical officers. The prospect of promotion to one of these posts are employed in all central and district jails, of jailors and warders, and convict petty officers are employed in the jail administration at two weak spots in the jail system. The moment are the insincerity of Central Prison and the difficulty of obtaining good and sufficient warders.

**Employment of Prisoners**—The work on which convicts are employed is mostly carried on within the jail walls, but extra-mural employment on a large scale is sometimes allowed, as, for example, when a large

1906	1910	1911	1912	1913	1914
104,111	104,013	102,901	102,879	102,879	102,879
193,092	173,271	170,311	170,270	170,270	170,270
758,000	758,475	757,601	757,600	757,600	757,600
43,999	43,028	43,027	43,027	43,027	43,027
104,006	102,990	102,982	102,982	102,982	102,982
0.7130	0.7130	0.7130	0.7130	0.7130	0.7130
100,000	100,000	100,000	100,000	100,000	100,000
231,120	248,309	243,901	243,902	243,902	243,902
1,07,710	1,07,710	1,07,710	1,07,710	1,07,710	1,07,710
828	1,100	1,100	1,100	1,100	1,100
2,703	2,703	2,722	2,703	2,703	2,703
92,911	92,911	92,911	92,911	92,911	92,911
49,297	49,297	49,297	49,297	49,297	49,297
79,608	79,608	79,608	79,608	79,608	79,608
91,506	91,506	91,506	91,506	91,506	91,506
92,870	92,870	92,870	92,870	92,870	92,870

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The daily average number of prisoners, which had steadily decreased since 1908, rose slightly in 1913 to nearly the figure of 1911. The fall in 1912 was, however, largely attributable to the release of convicts and civil prisoners on the occasion of the Delhi Durbar. The increase in 1913 was distributed among all provinces except the United Provinces of Agra and Oudh and Coorg, in which the figures continued to show decreases.

More than one-half of the total number of convicts received in jails during the year came from the classes engaged in agriculture and cattle tending, over 132,000 out of 160,000 are returned as illiterate.

The percentage of previously convicted prisoners was 17.29 as against 16.45 in 1912, while the number of youthful offenders fell from 726 to 626. The following table shows the nature and length of sentences of convicts admitted to jails in 1912 and 1913 —

Nature and Length of Sentence		1913	1912
Not exceeding one month		43,700	44,080
Above one month and not exceeding six months		61,580	62,020
" six months		29,245	27,683
" one year		21,384	20,551
" five years		2,280	2,336
" exceeding ten years		312	235
Transportation beyond seas —			
(a) for life		1,148	1,050
(b) for a term		750	724
Sentenced to death		870	761











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— 154 (continued) —

the present study, the authors found that the mean age of the participants was 30.5 years, which is slightly higher than the mean age of the participants in the previous study (28.5 years). This may be due to the fact that the participants in the present study were recruited from a larger pool of students, which may have resulted in a higher mean age.

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1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.

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was a country of small capital, and when a manufacturing was started it frequently happened that the bulk of the capital was used up in the initial stages leaving only a small margin to serve as working capital. In his opinion the Government should be distributed in the same way as takavi advances. The Hon Mr Dadabhai said there was an insistent and growing demand in the country for pecuniary help to Indian industries. The banks were quite inadequate for this purpose, they came back to the State and State help through the medium of takavi advances. The Hon Mr Ghunawati said that India had none of the advantages which had conduced to the industrial growth of Japan, they had no capital, no skill, and no expert knowledge. They required help for the encouragement of small industries, such as weaving, spinning, sugar manufacture, articles, all these could be fostered under judicious guidance if capital were forthcoming. The Hon Mr Banerjee hoped that the Government would accept the resolution. They felt with all the depth of affection which they possessed that the future of India largely depended upon her industrial prospects. We talk of political regeneration, self-government and so on, but in our heart of hearts we feel that political regeneration can only come in the track of industrial growth and emancipation. We have the history of Japan before us, we have the history of Germany before us, The Hon Mr Carr briefly described what had been done for the promotion of industries in Alabar. He said the difficulties experienced were the employment of experts, the building of factories, the erection of machinery, and the provision of capital. The Madras Government in addition to providing experts for investigation and guidance had advanced a sum of nearly two lakhs of rupees for the starting of special work in connection with industries in which the economic situation appeared to justify the hope that something new might be done. Work had been started on a pencil factory in Coimbatore, on the revival of glass factory, on oil pressing experiments, on oil refining experiments and on soap making experiments. The Hon Mr Ibrahim Rahimtoola said that the suggestion of takavi advances was tantamount to making Government start the business of lending money on the mortgage of industrial concerns with more stringent powers of recovery of interest and principal. Then what would happen to these industries immediately the war was over? They would be confronted by the subsidised and State aided competition of foreign countries. Industrial concerns were ready to produce manufactured goods, by that time the same competition which had operated against the success of Indian industries in the past would be revived. Then what would become of these new ventures? There would be a good chance of success for new industries if India was allowed to work on the principles of fair trade. The Hon Mr Dadabhai said there were weighty political reasons to justify the acceptance of the resolution.

The Hon Raja Kishnapal Singh proposed a resolution dealing with the promotion of industries in India. This motion reflected a widespread desire throughout the country and it proved the general expectation of an industrial development which would make India a self-supporting country. There was a feeling that the certain hour had arrived through the absorption of Europe in war and the closing of the Indian market to Germany and Austria who were the principal exporters of manufactured goods. The resolution took the following form—  
“That this Council recommends that, in view of the cessation of imports from hostile countries, the Government be pleased to invite the opinions of the Local Governments and Administrations as to the desirability of promoting industrial enterprises by loans on the lines of advances already made in the past. In supporting it the mover said that the only two countries which might possibly capture the Indian market were the United States and Japan. The present freedom from the commercial and industrial domination of Germany and Austria. It was a temporary relief. Unless India filled the void caused by their elimination from the market, it would be small solace if their place was taken by some other country such as the United States or Japan. But the history of industrially progressive countries supported the view that the State might, with profit, render substantial aid to industries. The aid chiefly needed by India was the provision of capital. It was admitted on all hands that capital is badly needed in India for the development of her resources and the general complaint was that money did not flow into industrial channels in India as freely as in other countries. It was necessary therefore that Government should, as a matter of principle and policy, finance such concerns as held out the best prospects of success. The resolution was supported by practically all the non-official members of the Council. The Hon Sir Gangadhar Chitambar said that his experience in the Central Provinces had satisfied him that for Indian industrial development some scheme or financial assistance was desirable. Failure in many cases was due to scarcity of liquid capital at a time when it was most needed. This

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It is believed that Germany expected that India would support her in this war. If Germany harboured such a absurd belief it only shows how the West is often mistaken in its reading of the Indian character. It is all the more remarkable that this mistake should have been made by a nation which claims to have made a special study of ancient Indian literature. What is this war? Is it not a war between the moral forces of humanity and brute power? The object of the war is to establish the supremacy over all that is good and noble and virtuous in man. A few amendments to the verbiage of the resolution were suggested by the Commander-in-Chief and accepted, it was strongly supported by all the unofficial members of the Council, carried, and accepted by the Viceroy with an undertaking to convey it to His Majesty.

tion. There was a strong feeling that govern-

Each should be more of Indian industry development than it had hitherto done and

that this development in a large measure de-

of the government unless the new

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There were capitalists who were not to put

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tries would be productive. The impact for

to the fact that the industry is not yet fully developed and the market is not yet fully open.

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while it was particularly difficult to obtain during

the war conditions out of which the present

opportunities arose when it was suggested that Government should provide the capital

Required it is apparently forgotten that Gov-

pressing needs for money in London

to the national contribution to the mission and effort of the United States in the Pacific.

on certain southern land. This was a society

position was very different in 1922 to 1924

it is as plain and industrial looking as the

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their present financial circumstances, the Gov-  
ernment would not contemplate a policy of

in no way sums up the position or in

to strengthen the banking position which

was the blood of commoners, by offering to the gods through

the Presidency Banks whilst the motion in

and systems with the object of the movement government could not keep the resolution

in the form in which it is proposed. The latter

modified and accepted in the following, to in-

that the Committee is not in a position to report on the opportunity afforded by the

sition of imports from hostile countries from

operation is not practicable in the

At the sitting on March the 2nd the Com

in order to (help) answer the question of

in relation to the scale of pension allotted to

Indians in the region —

הנהגתו של השר לא תהיה כדאית, והוא יפגע במוניטין של משרדו, ויפגע במוניטין של הממשלה.

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THE UNIVERSITY OF CHICAGO

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For an Indian Officer

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possibly spaced out by considerable periods during which all the work previously done had been lying idle and all the capital employed had been lying idle. He submitted that it would be inexpedient to fail to proceed with the construction of the small new railways provided for in the Budget. They had to look forward to a great revival of trade when the war was over. There was also the question of employment, it was very undesirable that anything should be done to lead to greater unemployment than must inevitably be the result of the war. The Hon. Mr. Ghaznavi showed that there was a profit from the railways and the irrigation works of some six millions sterling. There were other ways in which money for education and sanitation could be obtained than by curtailing the railway budget. The Hon. Mr. Ghaznavi pointed out that the Budget reduced the railway grant from £12 millions to £8 millions. His own opinion was that to go ahead properly and to maintain the railways something like £15 millions sterling or £16 millions was required. Those who had advocated the claims of education, in the circumstances, should be well pleased that they this year of war as they had ever had before. The Finance Member showed that the Railway programme had been curtailed by one-third. He did not in the least undervalue the benefits of education and sanitation, but the people were equally benefited by an expansion of railway facilities, which, expanded trade, mitigated the effects of famine or scarcity, and added to the personal convenience of Indian travellers. The financial effect of Mr. Dadabhai's proposals would be not merely to add to their Imperial revenue deficit, but to diminish their cash balance, and to increase proportionately the amount of new year's borrowings on account of the unproductive debt, the productive borrowing being decreased in the proportion from the annual point of view. This was a most unseasonable proposal. Taking all the heads together the diminished outlay under education and sanitation was trifling in comparison with the reduced provision made for railways. The Hon. Mr. Abbott opposed any reduction in the construction of railways and the resolution was rejected. The Hon. Mr. Dadabhai proposed a resolution that the court of the Judicial Commissioner of the Central Provinces be replaced by a Chief Court, consisting of five Judges or more. He said that the Judicial Commissioners Court was unsuited to the present conditions of the Central Provinces and that the development of the Provinces had been very great indeed. Notwithstanding the ravages of plague and famine, the population had grown from 10,579,184 in 1871 to 16,033,310 in 1911 or an improvement of nearly 50 per cent. Such a progressive population demanded better and more up to date arrangements for the administration of the Province and the existing budget for the Province failed to satisfy them. The growing sense of importance of the Provincial people required that a Chief Court should be established at Nagpur. Sir Gangadhar Chitambar said there was a desire among the local people for an improvement in the machinery for the administration of justice in the Chief Court of the Province with a view to cope expeditiously with the increased work on account of the development of the Province. The Hon. Member said doubtfully whether the mere alteration in the name and status of the Court was going to alter materially the nature of the justice administered by that Court. However, he hoped the mover of the resolution would be satisfied if the attention of the local administration was drawn to his resolution and an opportunity given to the local administration to consult with their officers, with the Judges of the Judicial Commissioners Court and with non-official members. When they had considered that question, if the change was recommended by the local administration and it was considered by the Government of India that a case had been made out, no doubt necessary action would be taken. The resolution was withdrawn.

The Council, re-assembling on March 9th, commenced the second stage of the discussion on the Budget, when it is considered head by head. The Revenue Member introduced the items concerning his department, when the Hon. Pandit Madan Mohan Malaviya moved a resolution that the budget allocation for productive irrigation works be increased by fifteen lakhs of rupees. His argument was that the Irrigation Commission recommended that the whole amount of the Famine Insurance Grant should be devoted to irrigation minus such sum as may be needed for the actual relief of famine when it should occur, but they found that even that figure had not been maintained. In 1913-14 the amount spent was Rs. 92,33,927, whilst in the budget for last year Rs. 1,80,00,000 was provided and Rs. 1,74,96,000 spent, and in the budget for the coming year only Rs. 1,55,00,000 were provided. In the budget before them railways were expected to yield 32 per cent and irrigation 5.80 per cent. It seemed then that irrigation was ever so much more profitable than railways, as well as being more beneficial in many respects. The Revenue Member, whilst welcoming the resolution, said that they had provided in the budget for the full amount which they reckoned that they could spend. There were very great difficulties in preventing large irrigation schemes. Still, they hoped to be able to spend more freely in future when the works now under consideration were put in hand and expenditure was being undertaken which would lead to a great economy of water. He had done all in his power to spend the largest possible sum on protective irrigation works. The motion was rejected.

The Education Secretary and the Member for Commerce having introduced their heads moved a resolution recommending that a sum of twelve lakhs of rupees be provided in the budget to aid and encourage indigenous institutes. The debate on this subject followed the lines of the earlier discussion on the same subject, which has already been fully summarised. No new matter was introduced into it. The Member for Commerce opposed it on the ground that the mover had not suggested that his twelve lakhs should be







Probably could be successful the Communist Government pointed out that whilst the imports of sugar were increasing they still topped only a small portion of the total Indian consumption. The production of cane sugar in India (consumed for the most part in the form of gur) is an unimportant quantity, but it probably exceeds 2,000,000 tons and there was also close on half a million tons of pining tree gum, making over 3 million tons in all. As against this our imports amounted in the previous year to only 800,000 tons.

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“This policy Government would accept it.”

An interesting debate followed. The Hon. Sir Ibrahim Rahimtoola said the sympathy of the people could not be with the cultivators who would be deprived of the substantial profit which would accrue from high prices. He perceived a shifting export duty. If Government did undertake the management of the wheat export he suggested that it should be done through the Supply and Transport department. The Hon. Sir Gangadhar Chitambar said that the action taken by Government was essentially desirable on political grounds. The Hon. Mr. Dadabhai maintained that the Government interfered in the trade the better and it was reasonable that existing channels of the export trade should carry on the agency of the future exports. The resolution as amended was passed.

At the meeting of March 24, the Hon. Sir Ibrahim Rahimtoola moved a resolution stating that it was desirable that **State Railways** in future should be managed by the Government instead of by Managing Companies. The advantages which he expected to result from such a system were as follows—

- (1) The saving to the State of the share of profits now paid to the Managing Companies
- (2) The development of trade and commerce on natural lines instead of the present artificial diversion by means of block rates.
- (3) The growth and development of industries especially in the interests of this country
- (4) The promotion of inter-provincial trade and what would be shipped in to London
- (5) The centralisation of control in a single State Department located in India and amenable to Indian public opinion instead of in Boards of Directors in London

The Hon. Mr. Marshall Reid opposed the resolution on the ground that it reversed one very important principle, namely, decentralisation. Secondly, because it added a great deal of responsibility to a department which was already over-burdened with work. Thirdly, because it aimed at reducing the power and the initiative of the managers who were primarily responsible for controlling railways. The Hon. Mr. Abbott also opposed the resolution because it would kill competition. The Hon. Mr. Setakal took the same line on the ground that no State department would have the same initiative as a public company. The Hon. Mr. Montagu said that subject to improvements in detail the present system was the best.

The Commercial Member declined to discuss in detail the respective merits of Government or private management of railways. He said, however, that Government had already, with this for export forcing up prices. It the move

and the indications of a bounteous harvest about them, to be bewildering and even sinister, and that wild reports should have been circulated of the whole crop having been bought up, and other dangerous and baseless rumours of the kind. They do not understand, and they could hardly be expected to understand, that the same forces, the cheapness and efficiency of communications, which have so largely to India's advantage by bringing her produce to the market, so the world's produce heavy demands when the world's produce is short of its requirements. There had therefore been not only a very real economic distress, but great discontent and disturbance of men's minds owing to this continuance of the high price of wheat.

“The course which Government had decided to take was, if he might say so, bolder and more comprehensive than the remedies which he had discussed so far. They proposed no less a matter than taking over the whole control of the export trade. Their committee, after the 1st of April, no private export of wheat would be allowed. What they proposed was that wheat for export should only be bought on behalf of Government and only shipped on behalf of Government. They should therefore, prohibit the export of wheat except on behalf of the Government from the 1st of April to the 31st March next year. They had decided to extend by another three months the period of prohibition originally announced in their Communiqué. It was their desire as far as possible, to avoid interference with the ordinary channels of trade, and they proposed, therefore, to employ in this business firms who normally conducted the export trade or who in India they proposed to appoint a special officer who would be known as the Wheat Commissioner with a sufficient staff to superintend operations in India, and to select for this purpose Mr. Gubbay a very able official in the Customs Service, who had had special experience as to commercial questions. The firms employed would buy at prices fixed by them and put up quantities fixed by them. The wheat would be shipped in to London and would be sold there through ordinary commercial agents on behalf of Government. The firms wanted to that agents would be recruited in the ordinary manner by a commission and the profits of the transactions would accrue to Government. As he had already indicated, these profits might be large and it might be in the right that they should be secured by the State rather than that they should go to one of the particular classes of the community, but they regarded it as a difficult and risky thing to that ordinary revenue and they hoped that it might be possible to make some arrangements by which such profits as might accrue would be put under special purposes. The essence of the scheme was that Government would have the power of fixing the prices at which purchases were to take place in India for export, or rather above which they were not to take place. This, with the additional safeguard of that Government would also preserve the maximum quantities to be bought, should ensure that there could be no possibility of put this for export forcing up prices. It the move



of ever-increasing complexity arising every day. Government. The principle of Executive Councils for local Governments, by which the local administration is less dependent upon the personal equation and which ensures a greater continuity of policy, has already taken root in India and cannot now be eradicated. Moreover the inclusion of an Indian gentleman in the Council of a province is to my mind a source of great strength to the Governor or Lieutenant-Governor. I speak from my own experience, and have no hesitation in saying, without any idea of flattery, that the presence of my friend Sir Ali Imam on my Council and his knowledge and experience are and have been of the greatest possible advantage to me and my Government. I can well understand that all educated people of this country will be disappointed at the result of the action of a small party in the House of Lords but I would ask them not to be depressed for I regard the proceedings of the 16th March in the House of Lords as only a temporary setback and I feel as confident that the United Provinces will have its Executive Council within a very short period so that the dawn will follow the night.

"The activities of the Council during the current session have necessarily been circumscribed by the decision to avoid as far as possible all controversial business. Nevertheless some measures of importance have come under your consideration. I need only refer to the measure recently passed in this Council to secure the defence of India and the public safety, in order to express the thanks of Government for your loyal co-operation in enacting this measure. Another Bill of importance has also been passed in this Council, namely, the Assam Labour and Emigration Act, which I hope will mark a stage in our efforts to remove abuses attendant on the present system of emigration and in securing that the welfare of labourers recruited to Assam is adequately safeguarded. The only other measure of importance to which I need allude is the Benares Hindu University Bill which was introduced into this Council on the 22nd. It will be a source of gratification to me at this measure becomes law during my tenure of office as Governor-General. The Council then adjourned till the 10th day of April."

The Council met again at Simla on September 17th. The Indian Frusts (Amendment) Bill was introduced. The Indian Soldiers Litigation Bill providing for the special protection in respect of civil and revenue litigation of Indian soldiers serving under war conditions was introduced. The Repealing and Amending Bill and the North-West Frontier Constabulary Bill were introduced and the Sir Jamsetjee Jejeebhoy Bazaar Vessels Bill was referred to a Select Committee. The Benares Hindu University Bill was sent to a Select Committee on September 22. The Indian Ports (Amendment) Bill was introduced as well as the Indian Medical (Bogus) Degrees Bill. The Commercial Import Duties (Amendment) Bill which provided facilities for the payment to a public authority of the Enemy Trading Bill which provided facilities for the payment to a public authority of the

The first important debate was on a motion by the Hon. Mr. Shastry asking for the direct representation of India at the next Imperial Conference. The mover said that it was a source of deep disappointment as well as of profound astonishment that in spite of her prominent position in the galaxy of peoples and countries constituting the British Empire, of her political, economic and strategic importance, of the obvious utility of her participation in the deliberations of the Conference and of the invaluable services rendered by her to the Empire, India should have been hitherto excluded from this scheme of Imperial Federation. Continuing he asked, "My Lord, as then a single problem of Imperial or even international interest in which India as an integral and an important part of the British Empire, is not directly concerned? Is there a single Imperial question in relation to which the interests of Great Britain, of the self-governing Colonies, and of India are, under the existing conditions, not indissolubly bound together? Can any scheme of Imperial defence be regarded as complete without taking into account India's defensive requirements and her offensive capacity not only in relation to her own frontiers, but, as recent events have made it abundantly clear, also in connection with the military needs of the Empire in every portion of the globe?" Is it possible to evolve any scheme of Imperial Preference, or to introduce any workable Imperial fiscal reform, without taking into consideration what may be called India's inter-Imperial interests? To these and other cogent questions there can be but one answer. India is directly and materially interested in all important problems of the Empire, of which she is proud to form an integral part, to the same extent and in the same degree as any other portion of His Imperial Majesty's vast dominions." India, he concluded, was not content with the occasional presence of a Secretary of State at the Imperial Conference, what she wanted was her own direct representation like the British Colonies.

His Excellency the Viceroy intervening early in the debate made the following important pronouncement—

"At the Imperial Conference of 1911, the Secretary of State for India was present at a meeting, but India herself had no recognised place in this Conference.

"Representation is, therefore, at present confined to the United Kingdom and the self-governing Dominions, and no one can now attend the Conference as a representative except a Minister. Further, alterations in the constitution of the Conference are made only by and at the Conference itself, and, it precedent be followed, take effect only at the next succeeding Conference. From this statement of the actual constitution of the Imperial Conference you will see that the ultimate decision upon the representation of India at the next meeting of the Council rests with the Council."



In winding up the session His Excellency the President again reviewed the situation in India as a whole. He said —

In India tranquillity has prevailed, and no more taken under the licence of India. Let have succeeded in restoring order in the Punjab which had been disturbed during the course of last cold war effected by the return of investment from India and the limited services rendered with the voluntary ideas. The powers granted I under the Defence of India Act have been used with great discrimination by the Government. The Lieutenant Governor, and the Secretary to Government, have thoroughly looked up of the Punjab have been thoroughly satisfied with the working of the Special Tribunal, and express my appreciation of the loyal attitude of the people of the Punjab in the time I have recently given to the police in maintaining these dangerous disturbances, and my admiration of the officers and constables devoted to duty of all ranks of the Punjab police.

[illegible]

The Unit of Nazimism has from the beginning of the war observed an attitude of strict neutrality and I have every reason to believe that it will be equally maintained.

In 1937 the situation here was much to be deplored. Bands of criminals and vagabonds were terrorizing the country, and the Government was unable to cope with the lawless and lawless elements. Only recently, thanks to the Government of German agents, two British officers and Indian soldiers were killed by a criminal gang in British India and a British command was killed in the Punjab. The Government was in a position to provide troops to take hostilities against the lawless and lawless elements. The Government of German agents, two British officers and Indian soldiers were killed by a criminal gang in British India and a British command was killed in the Punjab. The Government was in a position to provide troops to take hostilities against the lawless and lawless elements.

In conclusion, we aimed, that nobody could  
 look upon the past fourteen months of war  
 and the part India had played in it with greater  
 surprise than he did and nobody could be more  
 surprised that he was of the joyful day of the  
 people of India, but as the war progressed  
 it was more and more evident that the  
 high mightiness of the press came out and  
 the world that India was justified

of the same kind, but the results are not so clear. The results of the study of the effect of the amount of water on the growth of the plant are also not clear. The results of the study of the effect of the amount of water on the growth of the plant are also not clear.

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I am to think all that we  
 have expressed at the time  
 in our petition for the claims  
 of our country has been tried and  
 rejected in the most ungrateful  
 and ungenerous manner. I  
 am left from the govern-  
 ment as a man without support  
 and without a friend.



[illegible]

The Madras Port Trust Amendment Bill, 1908, is in the hands of committee, and it is expected that the Bill will be introduced by the Government in the next session. The Bill is intended to amend and define the powers of the Port Trust, and to provide for the appointment of a committee to inquire into the management of the Port Trust. The Bill is also intended to provide for the appointment of a committee to inquire into the management of the Port Trust.

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**Modern Estate**









mad Shah and other speakers referred to the High Court and an Executive Council. In summing up the debate Sir Michael O'Dwyer dwelt on the prosperous state of the provincial finances and on the many calls that were being made on them for larger expenditure in all directions. He spoke of the far-reaching effects of the war and of the economic distress caused by the rise in the prices of food-grains. Dealing with the organ seed conspiracy of returned emigrants to subvert the Government and the outbreak of lawlessness in the Western Punjab, he described the measures taken to cope with lawlessness. Government, he affirmed could face these outbreaks with equanimity because they had proof that the overwhelming majority of the people of all classes and creeds were determined to support them in quelling the disorder. Finally His Honor declared that the real temper of the people was shown by the splendid way in which Mohammedans, Sikhs and Hindus alike had rallied to the call of the Empire and were shedding their blood in its defence.

At the final meeting of the Council on September 25th the amended rules for the conduct of business introduced at the last meeting were passed. The Military Transport Bill was also passed. The Hon Mr Thompson introduced the Medical Practitioners' Registration Bill. The main feature of the Bill was the institution of a Medical Council of twelve, half to be nominated by Government and half to be elected by registered practitioners. The main duty of the Council would be to keep a register of practitioners who in its opinion were properly qualified in western medicine and surgery, and it would have power, subject to an appeal to Government, to remove the names of those who had been convicted of offences or have been found guilty, after inquiry, of infamous conduct in any professional respect. It would also be made a punishable offence for a person falsely to pretend that he was a registered practitioner. The Bill did not interfere with hakims and vaidas and did not prohibit practice by unregistered practitioners. It was referred to a Select Committee. The Lieut-Governor closed the session in a powerful speech in which he reviewed the legislative harvest for the year was very small. This was natural in the special circumstances caused by the war and the impending return of the Lieut-Governor in the interval between the end of the financial year and the departure of Sir Harvey. Atkinson at the end of October the period covered by the session of Sir Harvey's service, no new Bill was introduced though there was a certain amount of preliminary work carried out in connection with measures to be discussed later.

The first meeting of the Council took place on March 13th when the Hon Mr Rice introduced the Burma Medical Bill, which follows the lines of similar measures enacted in 1914 to July 1915—and they had not yet ceased—created a state not only of alarm and insecurity but in some cases of terror and even panic, and if they had not been promptly checked by the firm hand of authority and the active co-operation of the people, would have produced in the province as was intended by the conspirators, a state of affairs similar to that of Hindustan in the Mutiny—paralysing of authority, widespread terrorism, military of troops, wholesale robbery and murder not only of the officers of Government but of loyal and well-posed subjects. He went on to point out that though most of the conspirators were Sikhs, they were in no way representative of the Sikh community, which had given such signal proofs of its valour and devotion in this war. The conspirators had been publicly disowned and repudiated by that community and it was the active help given by Sikhs throughout the province and by the authorities of Sikh states that enabled so many of the criminals to be brought to justice. Of 6,000 returned emigrants, His Honor said, 250 believed to be the most dangerous had been temporarily interned as civil prisoners, 1,700 had been restricted to their villages or put on security and 4,000 had been allowed complete liberty of movement. In conclusion Sir Michael O'Dwyer spoke of the great part the martial races of the Punjab were taking in the war. Almost half the troops sent overseas were Punjabis and of 99,000 recruits added to the Indian Army since the beginning of the war 44,000 were from the Punjab.

During the year the Council lost a valued unofficial member through the death of Sir Arthur Ker and another member Sardar Daljit Singh, relinquished his seat on appointment to the Council of India.

## Burma Legislative Council.

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and the other, the "unreasonable" one, is the one that is not based on reason. The "reasonable" one is the one that is based on reason. The "unreasonable" one is the one that is not based on reason.

considered the report of the Select Committee on the subject of the National Medical Bill. No amendments were suggested in the discussion on the Bill the Hon. Mr. De Brien proposed that the proceedings of the inquiry be set into the conduct of a reference should be reduced to writing and incorporated in a Bill statement of the charges, decisions and evidence in support and refutation of the charges the decision and the Council's decision. This amendment was accepted and proposed by the Hon. Mr. Douglas to compel assent under this Act also was not approved. The bill was then passed.

The Hon. Mr. Bacht presented to the Council the bill which provided

Mr. Hon. J. H. McLean, of the United States Senate, has been elected to the office of Governor of the State of New York. He was elected on the 1st of November, 1892, and will enter upon his duties on the 1st of January, 1893. He is a member of the Republican Party, and has been a member of the Senate since 1887. He is a native of New York, and has resided in the State for many years. He is a man of high character, and has been a successful business man. He is a member of the New York State Bar, and has been a member of the United States Senate since 1887. He is a man of high character, and has been a successful business man. He is a member of the New York State Bar, and has been a member of the United States Senate since 1887.

Chief Deputy Minister in the extraction of timber which at present is mainly in the hands of private firms holding leases. The Hon. Manning suggested a return to the village system of police, he said, was not beloved of the people themselves - should be taken to the confidence of the Government and would be given powers, within their respective tracts, to preserve peace and order and to bring offenders to justice. The Hon. Mr. Du Ben discussed the system of education for the past ten years - suggested that it would be interesting to know how much of the heavy annual expenditure would now be divided among various educational sources. Mr. Manning suggested that it would be interesting to know how much of the heavy annual expenditure would now be divided among various educational sources. Mr. Manning suggested that it would be interesting to know how much of the heavy annual expenditure would now be divided among various educational sources.

secondary and Higher University Education, and also on various forms of Technical Education. He expressed dissatisfaction with the results of Anglo-American Education and thought that it was not time to lay a maximum expenditure from public funds on higher education and apply the available balance to primary, vocational education. The Hon. Mr. J. Macpherson pointed out that under the Burma Village Act the headman had ample powers and the Ministry of assigning him was imposed on all in the village tracts. It was the least restrictive policy of the Government to encourage headmen to exercise these powers and thereby to give valuable assistance in the prevention of crime. (The Hon. Mr. Keith explained the system under which

costs were leased to private firms at a fixed rate of royalty for fifteen years with the right of

from the decision of the Council to the Local Government persons liable for registration fall into three classes: those entitled to be granted a medical certificate, those entitled to be granted a medical certificate, and those entitled to be granted a medical certificate.

of the Indian universities and those who have been trained in Government Medical School and in quackish as military hospitals and sub-stations or Hospital Committee. The Bill was referred to a select committee.

Then the Hon. Mr. Keshu Prasad the Revenue Minister, He reminded the Council of the Revised Financial Statement for the previous year and stated that in estimating the income and expenditure for the next month four or five and six million conditions show a deficit of Rs. 5,20,00,000. But that was to be met by a reduction in expenditure of Rs. 1,27,11,00,000. As the Government of the Police by Rs. 2,71,00,000.

[illegible]

...the province was to be constituted on not having been compelled to adopt major proposals. The Government and on the part of the addition of Rs 15 lakhs to its income. In the form of Rs 15 lakhs to its from the Imperial Budget.

...this was the first meeting of the Council since the outbreak of the war the Hon Mr. Lloyd George moved that this Council records its deep conviction of the righteousness of the cause of Great Britain in the present war and assures His Majesty's Government of the unwavering loyalty and devotion to the British Throne of all communities and classes in Burma in its support of the move of the revolution men and the great disappointment and pain caused by the absence of Burmese participation.

The honorable gentleman expressed his sense of deep obligation to the British Navy for the maintenance with which it had cleared the seas of the enemy's ships, and enabled the commerce to proceed without interruption almost as safely as in times of peace.

supported the resolution in a speech in which

renewal on revised terms for another fifteen years. Thus Government did not get the benefit of once of a rise in the price of timber, but on the other hand it was guarded against a loss when the price fell. A scheme for the strengthening of the forest establishment was under preparation.

His Honour the President briefly reviewed the effects of the war on the industries and finances of the province and found a cause for congratulation in the fact that the [depression] had been far less serious than might have been anticipated. The worse sufferers from the war had been the rubber miners of Moga, many of whom had been compelled to migrate and find subsistence elsewhere. The chief inconvenience to the province as a whole was the shortage of shipping and the high rates of freight. But Burma shared this inconvenience with other parts of the Empire in the inevitable consequence of a great war.

Although the Burma Medical Bill, No 1 of 1915, is the only legislative outcome of the Council's discussions, there are several measures in course of preparation, including a Water-Hyacinth Bill, an Excise Bill, a Salt Bill, and a Revolution of Incubation Bill. The first introduced, it is said, by Chinnach to Burma in a recent year, which threatens to choke canals and navigable creeks in many parts of the Delta. The last is designed to put a stop to an old and dangerous Burmese practice, which services no useful purpose since the discovery of vaccination as a prevention of small-pox.

A Burma Wolfram Ordinance is under consideration. This is a war measure intended to facilitate the supply of labour to the mines and increase the output of the tungsten ores that are required in exceptional quantities for the purposes of the war.

## Bihar Legislative Council.

The Council met on January the 19th when His Honour the Lieutenant Governor referred to the splendid loyalty of the Province. The Hon Mr Bisham Prasad moved a resolution expressing to the King Emperor the unqualified loyalty of the people of the Province and the war which Britain had been compelled to undertake, also of gratification at the employment of Indian troops. The resolution was unanimous. It carried. Regarding to questions it was stated that the main buildings under construction for New Capital are Government House and Council Chamber the Secretariat the Post and Telegraph Offices and the High Court. The foundations of these buildings had been finished and work on the superstructures was well advanced. On March 14th, the Hon Mr Gait presented the revised financial statement. He said that owing to the war they had been asked by the Government of India to restrict their expenditure as much as possible whilst next year they had been permitted to draw on their balances to the extent of 33 lakhs. The greater part of this expenditure would be on the erection of buildings in the new capital. Many reforms which they were on the point of introducing, including the scheme for the reorganisation of the civil department and a more liberal system of scholarships in schools and colleges, had thus been partly postponed. Owing to the disruption which had thus been caused it had been decided to postpone for the present the revision of their provision financial settlement which would otherwise have been made with a view to the introduction of a permanent settlement with effect from the commencement of the coming financial year. On April 17th, the Hon Mr Bisham Prasad moved a resolution asking the Government to refer to the need for co-operation which would be manifested during the next year or two in this as in every other agency which was in store.

The Council then adjourned sine die.

Through the Burma Medical Bill, No 1 of 1915, is the only legislative outcome of the Council's discussions, there are several measures in course of preparation, including a Water-Hyacinth Bill, an Excise Bill, a Salt Bill, and a Revolution of Incubation Bill. The first introduced, it is said, by Chinnach to Burma in a recent year, which threatens to choke canals and navigable creeks in many parts of the Delta. The last is designed to put a stop to an old and dangerous Burmese practice, which services no useful purpose since the discovery of vaccination as a prevention of small-pox.

A Burma Wolfram Ordinance is under consideration. This is a war measure intended to facilitate the supply of labour to the mines and increase the output of the tungsten ores that are required in exceptional quantities for the purposes of the war.

When the Council reassembled on September 8th, the Hon Mr Levinge moved for leave to introduce the Bihar and Orissa Amendment Bill, 1915. He said the primary object of the Bill was to give effect to recent orders of the Secretary of State placing the proceeds of the Public Works Cess, which have hitherto been paid to Government account in district treasuries, at the disposal of district boards and district committees. The Hon Mr Levinge moved asked for leave to introduce the Bihar and Orissa Excise Bill, 1915. He said that early in 1912 the Government of India remarked on the increase in the number of excise prosecutions reported from the United Provinces in 1911 and in the number of convictions for offences relating to cocaine in Bengal which included Bihar and Orissa, and they drew the attention of the Government of the United Provinces and Bengal to the inadequacy of the penalties provided by the local acts in force. The question of amending the Act in the manner suggested was taken up and it was realised that it would be more convenient that the Province should have an Excise Act of its own. The Bill was introduced and referred to a select committee. The Hon Mr Edward Gait introduced the Patna Administration Bill, 1915 and it was referred to a select committee. The Hon Mr Edward Gait moved for leave to introduce the Bihar and Orissa Medical Bill, 1915, which was referred to a Select Committee. Several members then addressed farwell speeches to His Honour the President who is leaving India in his reply the President referred to the need for co-operation which would be manifested during the next year or two in this as in every other agency which was in store.

The particulars of any trust in which it is desired that the Public Trustee should act may be brought to his notice by letter or by personal interview, and upon his assent being obtained, his appointment should be effected in the ordinary way as in the case of private trustees. In the case of a Will about to be made, his appointment can be secured by the simple provision „I appoint the Public Trustee or his executor as the executor and trustee of this my Will.”

One of the forms of trusteeship which would appeal to English people residing in India is a scheme known as a "Declaration of Trust". An official pamphlet explains that the Public Trustee's services have been requested by

The Public Trustee of England is a Government (Public) Trustee (Public Trustee) which by the Statute in execution of a Trust under Will and is a Trustee under Statute, whether the instruments are new or old, and in other offices or an analogous office.

The above has been ascertained by the Government of India, and it is shown that it has been open to the value of the land in question, in the amount of Rs. 10,000,000, while the estimated value of the land in question is Rs. 10,000,000, and the Government of India have decided to purchase the land at the same price as the land in question.

[illegible][illegible]

On the 1st day of January, 1900, at New York City, N.Y., I have signed this certificate.

In witness whereof, I have hereunto set my hand and seal of office, at New York City, N.Y., this 1st day of January, 1900.

JOHN W. HARRIS,  
Notary Public for the State of New York.

On the excess of £50,000, one shilling and three pence per cent fee on income and one per cent if as is usual, the income be paid direct from its source to the Commission entitled, on any income in excess of £2,000 a year the fee is only  $\frac{1}{2}$  per cent. Where the income is paid through the Department then the fee is two per cent up to £500 a year, and one per cent on any excess or £500 a year, and 1 per cent on income in excess

except perhaps in the case of large trusts, power of reduction is but seldom exercised, and the fee, and their mutual character the special cases, but owing to the low range these fees to meet the peculiar circumstances of the borrower. There is power to vary the fee, and the Public Trustee out of this fee, and a part of the interest on the loan.

The department has been organised upon lines followed by commercial organisations. Forms are avoided wherever possible the methods of the Office prescribing prompt attention to all matters within the day.

The appointment of the Public Trustee secures certain definite advantages inasmuch as he is by Act of Parliament a Corporation Sole and thus it is said the Public Trustee never incurs the expense of appointment of other Trustees is permanently avoided. His



MEMORANDUM

Subject: ...

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## BENGAL MASONIC ASSOCIATION

for

Education Children of Indigent Freemasons  
Registered under Act XXI of 1860  
Instituted in 1869

*President*—The Right Hon'ble Baron Cram-  
phel of Sibirgh, G.C.B., G.C.M.G., District Grand  
Master

This Association is supported by capitation  
assessments from the Lodges in the District  
of Bengal and by voluntary contributions

1 A donation of Rs 500 made in one or  
more payments of not less than Rs 50 each  
constitutes the donor a *Vice-President* for Life  
with the privilege of five votes

2 A donation of Rs 100 constitutes the  
donor a *Governor* for Life, with the privilege  
of one vote and one vote for each additional  
donation of Rs 100

3 A subscription of Rs 16 per annum  
entitles the subscriber to one vote for the year  
and in extra vote for every additional Rs 16

4 The conditions of the above are the same  
whether the donor or subscriber be an individual  
or a Lodge, Chapter, or any other society

5 A general meeting of subscribers is held  
twice in the year, at Freemasons Hall, Clarendon  
Square, Park Street

6 The general conduct of the affairs of  
the Association is entrusted to a Committee  
composed of the President, Treasurer, and  
Secretary and of five Members to be elected  
at the February and July General Meeting

7 The funds of the Association are devoted  
solely to the board and education of children

8 Children are admitted into the Association  
at the age of seven years and continue therein  
until they have attained the age of seventeen  
years

9 This rule applies equally to children of both  
sexes without any distinction of religious deno-  
minations

10 Elections take place at each General  
Meeting of subscribers according to the number  
of vacancies and capabilities of the fund

11 No child is eligible to be placed on  
the List of Candidates unless his father has been  
an elected Member for five years and subscrib-  
ing Member of some Lodge for at least three  
years of that period

Subscriptions and donations are received  
by the District Grand Secretary and by the Secretary  
of the Association (Herbert E. Kent, Freemasons'  
Hall, 19, Park Street)

W J Bradshaw, Honorary Treasurer  
Herbert E Kent, Secretary

BENGAL MASONIC FUND OF

GRAND COMMITTEE

*President*

The Right Honourable Baron Cramphel  
of Sibirgh, G.C.B., G.C.M.G., District Grand  
Master

The Hon'ble Sir James Mcleod, K.C.B.,  
Deputy District Grand Master

C D Stewart P.D.G.

S A Fairweather, Deputy Grand Treasurer  
J A Dalton, Deputy Grand Secretary

H D Kent, Deputy A Grand Secretary

SCOTTISH MASONIC FUND OF

BENEVOLENCE

For the purpose of affording temporary relief  
to indigent Freemasons and their families

Grand Secretary—Arthur W Wise,

Liphinstone Building, Murzbach Road,  
Fort, Bombay

THE SCOTTISH MASONIC BENEVOLENT

ASSOCIATION IN INDIA

(a) For the purpose of granting allowances to  
old and destitute Freemasons and their widows  
(b) Granting allowances towards the mainte-  
nance and education of the children or de-  
pendants of indigent Freemasons

C D Fairweather, Honorary Secretary and  
Treasurer

J C Maitre, Honorary Assistant Secretary,  
Liphinstone Building, Murzbach Road, Fort,  
Bombay

THE IND MASONIC BENEVOLENT

ASSOCIATION

Registered under Act XXI of 1860  
(Established 1873)

Patron

Right Wor. Bro H B the Right Hon'ble  
Lord Lamington, G.C.M.G., G.C.B., Late Governor of  
Bombay

C H Chubb, President  
Secretary—Dramroze E Punthakey, Victoria  
Street, Pedy Quarter, Karachi

# Indian Architecture.

## I. ARCHIT.

For a full and complete history of Indian Architecture, see the following works:

### Other Hindu Styles

The style of architecture which is now called "Hindu" is a very old one, and is found in many parts of India. It is characterized by its simplicity and its use of natural materials. The most famous example of this style is the Great Stupa at Sanchi, which is a large, circular, stone structure with a central dome and four gates. Other examples include the Ashoka Stupa at Bharhut and the Stupa at Gandhara.

The style of architecture which is now called "Buddhist" is a very old one, and is found in many parts of India. It is characterized by its simplicity and its use of natural materials. The most famous example of this style is the Great Stupa at Sanchi, which is a large, circular, stone structure with a central dome and four gates. Other examples include the Ashoka Stupa at Bharhut and the Stupa at Gandhara.

### Indo-Saracenic

The style of architecture which is now called "Indo-Saracenic" is a very old one, and is found in many parts of India. It is characterized by its simplicity and its use of natural materials. The most famous example of this style is the Great Stupa at Sanchi, which is a large, circular, stone structure with a central dome and four gates. Other examples include the Ashoka Stupa at Bharhut and the Stupa at Gandhara.

of other decorative forms Great ingenuity came to be displayed in the use of pattern and of geometrical and and isolated ornament. This Moslem trait further turned the attention of the builders to a greater extent than before to proportion and to such means as giving beauty, mere richness and to go to symmetrical interest of and the aesthetic and no longer to be depended on for the same degree

The art was thus the gainer by the new conditions. It gained in power and variety much as "Classic" architecture gained under the Romans. But it equally lost something too. The Indo-Saracenic is apt to appear cold and hard. The writer was impressed by this on his first view of the Gwalior palace already mentioned. Though a Hindu building that palace has yet much of what might be called the more sophisticated quality of the Indo-Saracenic work as well as some similarity of detail. It has, being Hindu, a certain amount of sculptured ornament of unimpaired form, and the general effect of roundness, richness and interest thereby imparted seems to suggest as to what is lacking in so many of the Mahometan buildings.

## Foreign Influence

There would appear to be a conflict between archaeologists as to the extent of the effect on Indian art produced by foreign influence under the Mahometans. The extreme view on the one hand is to regard as the best of the art as having been due to foreign importation. The same view is supported by their Greek tendency, the development of new forms and modes of treatment which have been made, the similarities of the Mahometan buildings of India and those of North Africa and Europe, the introduction of the materials and above all the historical evidences that exist of the presence in India of Europeans during Mosal times, are cited in support of the theory. On the other hand those of the opposite school hold the foregoing view to be due to the prevailing European preconception that all light and leading must come by way of Europe, and the best things in art by way of Greece and Rome. To them the Gandharan sculpture, instead of being the best, is the worst in India even because of its Greek tincture. They find in the truly indigenous work beautiful and significant as not to be seen in the Greco-Buddhist sculptures, and point to those of Borobudur in Java, the work of Buddhist sculptors from India, wonderfully preserved by reason of the immunity from destructive influences given by the insular position, as showing the best example of the art extant. It is probable that a just estimate of the merits of the controversy, with respect to sculptures of any art, cannot be formed until we have ascertained some of the differences of taste that exist between East and West.

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## Index

principal centres of the Indo-Saracenic style—  
the former for the renowned Taj Mahal, for  
Akbar's deserted capital of Fatehpur Sikr,  
his tomb at Secundra, the Moti Masjid and  
palace buildings at the Agra fort at Delhi  
we have the great Juma Masjid, the Fort,  
the tombs of Humayun, Suddar Jung, &c.,  
and the unique Qutb Minar. Two other great  
centres may be mentioned, because in each  
there appeared certain strongly marked indi-  
vidualities that differentiated the varieties  
of the style there found from the variety seen  
at Delhi and Agra, as well as that of one from  
that of the other. These are Ahmedabad in  
Gujarat and Bijapur on the Deccan, both in  
the Bombay Presidency. At Ahmedabad  
with its neighbours Sirhey and Changanir  
there seems to be less of a departure from the  
older Hindu forms, a tendency to adhere to  
the hotel and barcha rather than to have re-  
course to the arch, while the dome, though  
constantly employed, was there never de-  
veloped to its full extent as elsewhere, or carried  
to its logical structural conclusion. The  
Ahmedabad work is probably most famous for  
the extraordinary beauty of its stone "jali" or  
pierced lattice-work, as in the palm tree  
windows of the Sid-i Sayid Masjid.

## Agra and Delhi.

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## II. MODELS

It is often said that the model is a kind of map. This is not true. A model is a kind of map, but it is a map of a different kind. It is a map of the world as it is, not as it should be. It is a map of the world as it is, not as it should be. It is a map of the world as it is, not as it should be.

The archaeological treasures of India are as varied as they are numerous. Those of the pre-Mahamadan period may roughly be divided into (1) architectural and sculptural monuments and (2) inscriptions. No building or sculpture in India was pretensions to be considered an example of architecture or art can be ascribed to a time earlier than that of Ashoka (c. 250 B.C.). In the pre-Ashoka art at the present day, wood was solely or almost solely employed. Even at the close of the 4th century, B.C., Megasthenes, the Greek Ambassador at the court of Chandragupta, grand-ruler of the Indian monarch, as "surrounded by a wooden wall pierced with loop-holes for the discharge of arrows." If the capital itself was thus defended we can easily infer that the architecture of the period was wooden. And long after stone was introduced the little styles continued to be influenced by, or copied from, the wooden.

Monumental Pillars.—The first class of works that we have to notice are the monumental pillars, known as *stupa*. The oldest are the monolithic columns of Ashoka, nearly thirty in number, of which ten bear his inscriptions. Of these the Lauriya-Nandangarh column in the Champarn District, Tirhut, is practically unjured. The capital of each column, like the shaft, was monolithic, and comprised three members, viz, a Purnapoliyan bell, abacus, and crowning sculpture in the round. By far the best capital of Ashoka's time was that executed at Sarnath near Benares. The four lions standing back to back on the abacus are carved with extraordinary precision and accuracy. Of the post-Ashokan period one pillar (B.C. 150) stands to the north east of Benares in the Gwalior State, another in front of the cave of Karli (A.D. 70), and a third at Udayagiri and Khandagiri 20 miles from Cuttack in Orissa. The caves belong to the three principal sects into which ancient India was divided, viz, the Buddhists, Hindus and Jainas. The earliest caves so far discovered are those of Barabar which were excavated by Ashoka and his grandson Dasaratha, and dedicated to Ajivikas, a naked sect founded by Makkhali Gostoli. This refutes the theory that cave architecture was of Buddhist origin. The next earliest caves are those of Bhaja, Patakhora and Ajanta No 9 at Ajanta and No 19 at Nasik. They have been assigned to 200 B.C. by Ferguson and Dr Burgess. But there is good reason to suppose from Dr Marshall's recent researches and from epigraphic considerations that they are considerably more modern. The Buddhist caves are of two types—the *chaityas* or chapel caves and *viharas* or monasteries, for the residence of monks. The first are with vaulted roofs and horse-shoe shaped windows over the entrance and have interiors consisting of a nave and side aisles with a small *stupa* at the inner circular end. They are thus remarkably similar to Christian basilicas. The second class consists of a hall surrounded by a number of cells. In the later *viharas* there was a sanctum in the centre of the back wall containing a large image of Buddha. Hardly a *chaitya* is found without one or more *viharas* adjoining it. Of the Hindu cave temples round the drum-like open passage for circum-

ambulation, and the whole is enclosed by a massive stone railing with lofty gates facing the cardinal points. The gates are essentially wooden in character, and are carved, inside and out, with elaborate sculptures. The *stupa* itself probably belonged to the time of Ashoka, but as Dr Marshall's recent explorations have conclusively shown, the railing and the gate ways were at least 150 and 200 years later, respectively. Other famous Buddhist *stupas* that have been found are those of Bharhut in Allahabad and Jabulpore, Ajanta in the Maharashtra Presidency, and Eran in the Nizampur District, Bihar. The most important groups of caves are situated in Bhaja, Bedsa, Karli, Kanheri, Jumnar, and Nasik in the Bombay Presidency, Ellora and Ajanta in Nizampur Donjons, Barabar 16 miles north of Gaya, and Udayagiri and Khandagiri 20 miles from Cuttack in Orissa. The caves belong to the three principal sects into which ancient India was divided, viz, the Buddhists, Hindus and Jainas. The earliest caves so far discovered are those of Barabar which were excavated by Ashoka and his grandson Dasaratha, and dedicated to Ajivikas, a naked sect founded by Makkhali Gostoli. This refutes the theory that cave architecture was of Buddhist origin. The next earliest caves are those of Bhaja, Patakhora and Ajanta No 9 at Ajanta and No 19 at Nasik. They have been assigned to 200 B.C. by Ferguson and Dr Burgess. But there is good reason to suppose from Dr Marshall's recent researches and from epigraphic considerations that they are considerably more modern. The Buddhist caves are of two types—the *chaityas* or chapel caves and *viharas* or monasteries, for the residence of monks. The first are with vaulted roofs and horse-shoe shaped windows over the entrance and have interiors consisting of a nave and side aisles with a small *stupa* at the inner circular end. They are thus remarkably similar to Christian basilicas. The second class consists of a hall surrounded by a number of cells. In the later *viharas* there was a sanctum in the centre of the back wall containing a large image of Buddha. Hardly a *chaitya* is found without one or more *viharas* adjoining it. Of the Hindu cave temples round the drum-like open passage for circum-

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pies that at Ellorā near Bombay is perhaps the most frequented. It is dedicated to Śiva and is not earlier than the 7th century A.D. But by far the most renowned cave-temple of the Hindus is that known as Kālāsā at Ellorā. It is on the model of a complete structural temple but carved out of solid rock. It also is dedicated to Śiva and was excavated by the Rashtrakuta king, Kṛṣṇa I, (A.D. 768), who may still be seen in the paintings in the ceilings of the upper porch of the main shrine. Of the Jaina caves the earliest are at Khandagiri and Udayagiri, those of the medieval type, in Indra Śābha at Ellorā, and those of the latest period, at Aṅgali in Asbi. The ceilings of many of these caves were once adorned with treco-paintings. Perhaps, the best preserved among these are those at Ajanta, which were executed at various periods between 350-650 A.D. and have elicited high praise as works of art. Copies were first made by Major Gull, but most of them perished by fire at the Crystal Palace in 1866. The last ones were again copied by John Griffiths of the Arts School, Bombay, half of whose work was similarly destroyed by a fire at South Kensington. They were last copied by Mrs. Hemmingham in 1911.

**Gandhara Monuments**—On the north-west frontier of India, anciently known as Gandhara, are found a class of remains, ruined monasteries and buried stupas, among which we notice for the first time representations of Buddha and the Buddhist pantheon. The tree use of Corinthian capitals, friezes of nude figures bearing a long garland, winged atlantes without number, and a host of individual motifs clearly establish the influence of Hellenistic art. The mound at Peshawar, locally known as Shah-jik-Dheri, which was explored in 1909, brought to light several interesting sculptures of this school together with a reliquary cavity, the most remarkable bronze object of the Gandhara period. The inscription on the casket let no doubt as to the mound being the *stupa* raised over the bones of Buddha by the Indo-Sarathian king Kanishka. They were presented by Lord Liot's Government to the Buddhists of Burma and are now enshrined at Mandalay. To about the same age belong the stupas at Manikāla in the Punjab opened by Jantip Singh's French General, Ventura and Court, in 1830. Some of them contained coins of Kanishka.

**Structural Temples**—Of this class we have one of the earliest examples at Sanchi, and another at Tigowa in the Central Provinces. In South India we have two more examples, viz, Lad Rājan and Durga temples at Alibole in Bijapur. All these belong to the early Gupta period and cannot be later than 500 A.D. The only common characteristic is that roofs without spires of any kind. In other respects they are entirely different and already here we mark the beginning of the two styles, Indo-Aryan and Dravidian, whose differences become more and more pronounced from the 7th century onwards. In the Indo-Aryan style, the most prominent lines tend to the perpendicular, and in the Dravidian, the horizontal. The salient feature of the former again is the curvilinear steeples, and of the latter, the pyramidal vimana steeples, in honour of the chief deity. The most notable examples of the first kind are to be found among the temples of Ellorā.

**Inscriptions**—We now come to inscriptions, of which numbers have been brought to light in India. They have been engraved on a variety of materials, but principally on stone and copper. The earliest of these are found included in two distinct kinds of alphabet known as Brahmi and Kharoshthi. The Brahmi was read from left to right, and from it have been evolved all the modern vernacular scripts of India. The Kharoshthi was written from right to left, and was a modified form of an ancient Aryan alphabet introduced into the Punjab during the period of the Persian domination in the 4th century. B.C. It was prevalent up to the 5th century. A.D. and was supplanted by the Brahmi. The earliest datable inscription, are these have been carved on rocks, and are other on pillars. They have been found from Shahbazgarhi 40 miles north-east of Peshawar to Nigāva in the Nepal Tāra from Ghat in Lower Himalayas to Sidhaur in Mysore, showing by the way the vast extent of territory held by him. The reference in his Rock Edicts to the five contemporary Greek Emperors, Antiochus II of Syria, Ptolemy Philadelphus, and the Emperor Augustus, is exceedingly interesting, and fixes B.C. 260 as the date of his coronation. His Kharoshthi pillar inscription, again, dated in the birth-place of Buddha which was for long disputed another noteworthy record is the inscription of the Deogarh pillar. The pillar had been known for a long time but Dr. Hartland records the erection of this column which is a Garuda pillar, in honour of the chief deity, by one Heliodorus, son of Bho in the 2nd century as an error of time and place. It is found at the temple of Ellorā.

Hedodorus is here called a *Bhagavata*, which shows that though a Greek he had become a Hindu and presumably a Vaishnava. Another inscription worth noting and especially in this connection is that of Cave No. 10 at Nasik. The donor of this cave, Ushavadata, who calls himself a Sakra and was an Indo-Scythian, himself spoke of as having granted three hundred thousand kine and sixteen villages to gods and Brahmins and as having annually fed one hundred thousand Brahmins. Here is another instance of a foreigner having embraced Hinduism. Thus for the political, social, economical and religious history of India at the different periods the inscriptions are invaluable records, and are the only light but for which we are 'forn and blind'.

**Saracenic Architecture**—This begins in India with the 13th century after the permanent occupation of the Muhammadans. Their first mosques were constructed of the materials of Hindu and Jaina temples, and sometimes with comparatively slight alterations. The mosque called *Adhai-din-ka-jhonpra* at Ajmer and that near the Qutb Minar are instances of the Muhammadan architecture of this kind. The Muhammadan architecture of India varied at different periods and under the various dynasties, imperial and local. The early Pathan architecture of Delhi was massive by and at the same time was characterised by elaborate richness of ornamentation. The Qutb Minar and tombs of Alauddin and Alauddin Khalil are typical examples. Of the Sharqi style we have three mosques in Jaunpur with several tombs. At Jaunpur in the Bhar State, a third form of Saracenic architecture sprang up, and we have here the Jam Masjid, Boshang's tomb, Jahaz Mahal and Hindola Mahal as the most notable instances of the Pathan and ecclesiastical styles of the Jalwa Pathans. The Muhammadans of Bengal again developed their own style, and Pandua, Malda, and Gaur became famous for the ruins of the buildings of this type, the important of which are the Adina Masjid or Sikandar Shah, the Elahi mosque, Kadama Rasul Masjid, and so forth. The Bahmani, Gwalberg and Bidar were also great builders, and adorned their capitals with important buildings. The most striking of these is the great mosque of Gulbarga, which differs from all Muhammadan mosques in India in having the whole central area covered over so that what in others would be an open court is here roofed by six hundred small domes. "Of the various forms which the Saracenic architecture assumed," says Lergusson, "that of Ahmedabad may probably be considered to be the most elegant." It is not for nothing that the work, and the work of the perforated stone windows in Sidi Sayyid's mosque, the carved niches of the minars of many other mosques the sculptured and paneled roofs is so acquired that it will rival anything of the sort executed elsewhere at any period. No other mosque is so essentially Hindu in complete conformity with this was the form of architecture employed by the Adil Shahi dynasty of Bijapur. There is here relatively little trace of Hindu forms or details. The principal buildings now left at Bijapur are the Jam Masjid, Gagan Mahal, Mhtar Mahal, Ibrahim Rauza, and mosque and the Gol Gumbaz. The latter predecessor, the Pirkans of Delhi, the Moghuls

were a great building race. Their style first began to evolve itself during the reign of Akbar in a combination of Hindu and Muhammadan features. Noteworthy among the emperor's buildings are the tomb of Humayun, and the palaces at Fatehpur, Sikri and Agra. Of Jehangir's time his mosque at Lahore and the tomb of Itimad-ud-daula are the most typical structures. "The force and originality of the style gave way under Shah Jahan to a delicate elegance and refinement of detail." And it was during his reign that the most splendid of the Moghul tombs, the Taj Mahal at Agra, the tomb of his wife Mumtaz Mahal, was constructed. The Jot Masjid in Agra, Fort is another surpassingly pure and elegant monument of his time.

**Archaeological Department**—As the archaeological monuments of India must attract the attention of all intelligent visitors, they would naturally feel desirous to know something of the Archaeological Department. The work of this Department is primarily two-fold, conservation, and research and exploration. None but spasmodic efforts appear to have been made by Government in these directions till 1870 when they established the Archaeological Survey of India and entrusted it to General (afterwards Sir) Alexander Cunningham, who was also the first Director-General of Archaeology. The next advance was the initiation of the local surveys in Bombay and Madras three years after the work of these surveys, however, was restricted to antiquarian research and description of monuments, and the task of conserving local buildings was left to the fitful efforts of the local Governments often without expert guidance or control. It was only in 1878 that the Government of India under Lord Lytton took to this deplorable condition, and sanctioned a sum of 3 lakhs to the repair of monuments in United Provinces, and soon after appointed a conservator Major Cole, who did useful work for three years. Then a reaction set in, and his post and that of the Director-General were abolished. The first systematic step towards reforming official responsibility in conservation matters was taken by Lord Curzon's Government, who established the seven Archaeological Circles that now obtain, placed them on a permanent footing, and united them together under the control of a Director-General, provision being also made for subsidising local Governments out of imperial funds when necessary. The ancient monuments Preservation Act was passed for the protection of historic monuments and relics especially in private possession and also for State control over the excavation of ancient sites and remains in antiquities. Under the direction of Dr J. H. Marshall, C.I.E., Director-General of Archaeology, a comprehensive and systematic campaign of repair has been prosecuted, and the result of it is manifest in the present altered conditions of old buildings. One has only to see for example the Moghul buildings at Agra, Delhi, Lahore and Ajmer in order to be convinced how the work of careful reconstruction and repair has converted these decayed and desecrated monuments with their modern erections into edifices of unrivalled loveliness. Another noteworthy feature of this work has been the rescue of many of the buildings from profane and sacrilegious uses. It is well-

known that the superb Pearl Mosque of Jahangir in the Lahore Fort contained a Government treasure, and the Sleeping Hall of Shah Jahan served as a Church for the British troops. At Bijnor two mosques have been recovered, one of which was used as a Babington and the other as Post Office. The local Kachhwa has now been expelled from the local mind of Sidhaur at Ahmedabad. The Cave temples at Saurashtra are no longer Godowns nor has Hindu University, and so forth.

## Indian Art.

Within the last few years there has been a most interesting and promising, though some what narrowly confined, revival in Indian Art. For this, it is to be feared, scant credit is due to British educational policy in India, though the impetus has come mainly from a few British and other European enthusiasts who have reminded cultured India of the value of its ancient artistic heritage and indicated the possibilities or revival. Each year between 2,000 and 7,000 students pass the various examinations of the four Schools of Arts maintained by the State, but until very recently those institutions have been in some respects seriously mistaken in ideal and method. Regarding their work over half a century it may be said broadly that they have paid very inadequate attention to the traditions of Indian Art, and that in consciously or unconsciously encouraging Western influences, which the Indian student could not thoroughly assimilate, they have not even been particular to choose good examples of Western art. Nor have the Schools of Arts been altogether free from the taint of commercialism, indeed, for some years one of them was in effect some-thing between an industrial workshop and an Emporium for selling Indian curiosities merely designed to meet the taste of tourists. In justice to the Schools it should be added that they have seldom been able to attract into their members of the hereditary craftsmen with this being unprofitable. Further, even for students who might attain to conspicuous skill, there have been few openings in after-life. All this is now changing, but the improvement began only some fifteen years ago, and it is mainly due to agencies more or less independent of the schools.

### A Notable Revival.

The revival which has already produced one notable article, Mr. Abanindranath Tagore, is of the direct outcome of the study of the work of the best periods of Indian art. In order to comprehend it, it is therefore necessary to glance back over the history of art in India. With scripture we are here not particularly concerned, for there is no perceptible revival

in it at present, but it may be said in passing that its golden age in India was the period which produced the sculptures of Ellora and Elephanta, that in its finest examples this art was genuinely Indian, for the Gandhara sculptures, which show strong Greek influence, are inferior enough to make the contention that India owed much to Greece absurd, and that perhaps the finest Indian sculpture is to be found in Java, where at Borobudur, in the eighth and ninth centuries A.D. the descendants of Indian emigrants wrought a long series of mighty masterpieces. In regard to paintings, we begin with those at Ajanta produced at intervals between the first century before Christ and perhaps the seventh century of the Christian era. A typical example in which a mother and her child supplicating Buddha are presented not only with much technical skill but with tenderness of feeling, may be found reproduced in Griffiths' book on Ajanta and in Mr. Harrell's Indian Sculpture and Painting. These paintings are true treasures, differing in method from the Italian in little but the use of mechanical as well as chemical combination of colours. Practically all the work of this time has perished, and of the secular art of the period before the Moguls there is scanty record. With the Moguls for the first time painting became a Hindu secular Whereas a Hindu philosopher had laid it down that it was unprofitable to represent natural objects when the ultimate aim of idolatry naturally caused it to be made the artist's duty to idealize the development of secular painting. The Mogul artists were Persians or others, not under the influence of the Persian school, but they followed a Persian and Hindu style. Akbar patronized them liberally, and he had his own workshop records in the East. The Mogul painting record is not so complete as that of the Mogul painting record, and it is to that period that the Mogul painting record is to be referred.



# Manners and Customs.

Next to the complexion of the people, which varies from fair to black, the tourists' attention in India is drawn by their dress and personal decoration. In its simplest form a Hindu's dress consists of a piece of cloth round the waist. Many an ascetic, who regards dress as a luxury, wears nothing more, and he would dispense with even so much if the police allowed him to. The Mohammedan always covers his legs, generally with trousers sometimes with a piece of cloth tied round the waist and reaching to the ankles. Hill men and women, who at one time wore a few leaves before and behind and were totally innocent of clothing, do not appear to-day within the precincts of civilization and will not meet the tourists eye. Children either absolutely nude or with a piece of metal hanging from the waist in front, may be seen in the streets in the most advanced cities and in the homes of the rich. The child Krishna, with all the jewels on his person, is nude in his pictures and images.

**Dress.**—The next stage in the evolution of the Hindu dress brings the junction nearly down to the feet. On the Malabar coast, as in Burma the ends are left loose in front. In the greater part of India, they are tucked up behind—a fashion which is supposed to be the narrow, or one end is gathered up in folds before and the other tucked up behind. The simplest dress for the trunk is a scart thrown over the left shoulder, or round both the shoulders like a Roman toga. Under this garment is often worn a coat or a shirt. When an Indian appears in his full indigenous dress, he wears a long robe, reaching at least down to the calves. The sleeves may be wide or long and sometimes puckered from the wrist to the elbow. Before Europeans introduced buttons, a coat was fastened by ribbons, and the fashion is not obsolete. The Alameda man prefers to button his coat to the left, the Hindu to the right. A shawl is tied round the waist over the long coat, and serves as a belt, in which one may carry money or a weapon. It allowed the greatest variety is shown in the head-dress. More than seventy shapes or caps, hats, and turbans may be seen in the city or Bombay. In the Punjab and the United Provinces, in Bengal, in Burma and in Siam, other varieties prevail. Cones and cylinders, domes and truncated pyramids, high and low, with sides at different angles, ridged brims, projecting brims, long strips of cloth wound round the head or the cap in all possible ways, ingeniously combining perhaps in the "parrot" of the Maratha turban—all these fashions have been evolved by different communities and in different places, so that a trained eye can tell from the head covering whether the wearer is a Hindu, Mohammedan or Parsi, and whether he hails from Poona or Dharwar, Ahmedabad or Bhavnagar.

**Fashion Variations.**—Fashions often vary with climate and occupation. The Bombay fisherman may wear a short coat and a cap, and may carry a water in his pocket, yet, as he must work for long hours in water, he would not cover his legs, but suspend only a coloured kerchief from his waist in front. The Pathan of the cold north-west affects loose baggy trousers, a tall head dress befitting his stature and covers his ears with its folds as if to keep off cold. The poorer people in Bengal and Madras do not cover their heads, except when they work in the sun or must appear respectable. Many well to do Indians wear European dress at the present day, or a compromise between the Indian and European costumes, notably the Indian Christians and Parsis. Most Parsis however have retained their own head dress, and many have not borrowed the European collar and cuffs. The majority of the them wear gowns and scarfs over them. The vast majority of Mohammedan women are goshas, and their dress and persons are hidden by a veil when they appear in public a few converts from Hinduism have not borrowed the custom. In Northern India Hindu women have generally adopted the Mussalman practice of seclusion. In the Dehlan and in Southern India they have not.

As a rule the hair is daily oiled, combed parted in the middle or the head, plaited and rolled into a chignon, by most women. Among high caste Hindu widows sometimes shave their heads in imitation of certain ascetics, or monks and nuns. Hindu men do not, as a rule, completely shave their heads. Mohammedans in most cases do. The former generally remove the hair from a part or the head in front, over the temples, and near the neck, and grow it in the fancy of the individual. Nowadays many keep the hair cropped in the European fashion, which is also followed by Parsis and Indian Christians. Most Mohammedans grow beards, most Hindus do not, except in Bengal and elsewhere, where the Mohammedan influence was predominant in the past. Parsis and Christians follow their individual inclinations. Hindus are known as Sathus or Satgurus as distinguished from Sanyasis, do not clip their hair, and generally coil the uncombed hair of the head into a cowl, in imitation of the God Shiva.

Hindu women wear more ornaments than others of the corresponding grade in society. Ornaments beneath the head, the ear, the neck, the arms, wrists, finger—the nose—until motherhood is attained, and by some even later—and the face. Children, however, are not so adorned. Each community affixes its particular ornaments, though the imitation is not universal. Serpents with several heads, and by some the lotus flower, and the cobra are common to the most popular objects of representation. The Pathan of the cold north-west affects loose baggy trousers, a tall head dress befitting his stature and covers his ears with its folds as if to keep off cold. The poorer people in Bengal and Madras do not cover their heads, except when they work in the sun or must appear respectable. Many well to do Indians wear European dress at the present day, or a compromise between the Indian and European costumes, notably the Indian Christians and Parsis. Most Parsis however have retained their own head dress, and many have not borrowed the European collar and cuffs. The majority of the them wear gowns and scarfs over them. The vast majority of Mohammedan women are goshas, and their dress and persons are hidden by a veil when they appear in public a few converts from Hinduism have not borrowed the custom. In Northern India Hindu women have generally adopted the Mussalman practice of seclusion. In the Dehlan and in Southern India they have not.

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**Caste Marks**—Caste marks constitute a

mode of personal decoration peculiar to Hindus, especially of the higher castes. The simplest mark is a round spot on the forehead. It represents prosperity or joy, and is omitted in mourning and on fast-days. It may be red, yellowish as when it is made with ground sandalwood paste. The worshippers of Vishnu draw a vertical line across the spot, and as Lakshmi is the goddess of prosperity, it is said to represent her. A more elaborate mark on the forehead has the shape of U or V, generally with the central line, sometimes without it, and represents Vishnu's foot. The worship- pers of Shiva adopt horizontal lines, made with sandalwood paste or ashes. Some Vaishnavas stamp their temples, near the corners of the eyes, with figures of Vishnu's conch and disc.

Other parts of the body are also similarly marked. The material used is a kind of yellowish clay. To smear the arms and the chest with sandalwood paste is a favourite kind of toilet, especially in the hot season. Bands of 'tila' or sacred Basil, and berries of Rudraksha round their necks by Vashnavas and Shaktas, containing the Linga or phallus of their god, besides wearing Rudraksha beads, rosaries round their necks and matted hair, smearing their bodies with ashes. Religious mendicants suspend from their necks figures of the gods in whose name they beg. Strangers or cowries may also be seen round their necks. Muslim dervishes sometimes carry peacocks feathers

Hindu women mark their foreheads with a red spot or horizontal line. High caste widows are forbidden to exhibit this sign of happiness, as also to deck themselves with flowers or ornaments. Flowers are worn in the children. Hindu women smear their faces, arms, and feet sometimes with a paste of turmeric, so that they may shine like gold. The choice of the same colour for different purposes cannot always be explained in the same way. The red liquid with which the cow eye is anointed may be a substitute for the blood of the animal slaughtered for the purpose in former times. In many other cases this colour has no such associations. The Muslim dervish affects green, the Shia is fond of blue, and the Sanyasi adopts orange for his robe, and no reason can be assigned with any degree of certainty.

Shiva—India is a land of temples, mosques and shrines, and the Hindu finds an every turn some supernatural power to be appeased. Shiva has the largest number of worshippers. He has three eyes, one in his forehead, a moon's crescent in his matted hair, and at the top of his head is the Mount Kailas in the Ganges. His abode is the river takes its source. Round his neck and about his ears and limbs are serpents, and he also wears a necklace of skulls. In his hands are several weapons, especially a trident, a bow, and a thunderbolt, and also a drum which he sounds while dancing. For he is very fond of this exercise. He sits on a tiger's skin, and his vehicle is a white bull. His wife Parvati and his son Ganu-ha sit on his thighs. An asceticism in an-

ing is attached to every part of his physical person. The three eyes denote an insight into the past, present and future, the moon, the serpents, and the skulls denote months, years and cycles, for Shiva is a personification of Time, the great destroyer. He is also worshipped as a Linga or phallus which represents creative energy.

**Ganpat**—Ganesh or Ganapati, the controller of all powers of evil subject to Shiva, is worshipped by all sects throughout India. Every undertaking is begun with a prayer to him. He has the head of an elephant, a large abdomen, serpents about his waist and wrists, seven weapons in his hands, and a piece of his trunk in one hand. He is said to have broken it off when he wanted to attack the moon for ridiculing him. The different parts of his body are also esoterically explained. His vehicle is a rat.

**Parvati**—Parvati, the female energy of Shiva, is worshipped under various names and forms. She is at the head of all female supernatural powers, many of whom are her own manifestations. Some are benign and beautiful, others terrible and ugly. Kail, the tutelary deity of Kailash or Calcutta, is one of her black a tongue smeared with blood projects from her gaping mouth besides her weapons, she carries corpses in her hands, and round her neck are skulls. Bombay also takes its name from a goddess, Ambabadevi. Gouri, to whom offerings are made in Indian homes at an annual festival, is benign. On the other hand the epidemic diseases like the plague and small-pox are caused by certain goddesses or "mothers."

**Vishnu**, the second member of the Hindu trinity, is the most popular deity next to Shiva. He is worshipped through his several incarnations as well as his original personality. His home is the ocean of milk, where he reclines on the coils of a huge, many-headed serpent. At his feet sits Lakshmi, shampooing his legs. From his navel issues a lotus, on which is seated Brahma, the third member of the trinity. In his hands are the conch, which he blows on the battlefield, and the disc, with which the heads of his enemies are severed. Round his neck are garlands of leaves and flowers, and on his breast are shining jewels. As Shiva represents destruction, Vishnu represents protection, and his son is the god of love. To carry on the work of protection, he incarnates himself from time to time, and more temples are dedicated to him, than to his most popular incarnations, Rama and Krishna, than to his original personality. Rama is a human figure, with a bow in one of his hands. He is always accompanied by his wife Sita, often by his brother Lakshmana, and at his feet, or standing before him with joined hands, is Hanuman, the monkey chieftain, who assisted him in his expedition against Ravana, the abductor of his wife. Krishna is also a human figure, generally represented as playing on a flute, with which he charmed the damsels of his city, esoterically explained to mean his devotees. **Brahma** is seldom worshipped only a couple of temples dedicated to him have yet been discovered in all India.



### Minor Deities—The minor gods and goddesses and the chief heroes and heroines with

[illegible]

The Jains in their temples, adore the sacred persons who founded and developed their art, and venerate some of the deities common to Hinduism. But their view of Divinity is different from the Hindu conception, and in the opinion of Hindu theologians they are atheists. So also the Buddhists of Burma pay almost the same veneration to Prince Siddhartha as if he was a god, and induced him above the Hindu gods, but from the Hindu standpoint they are also atheists.

Images—Besides invisible powers and deities, the Hindus venerate certain animals, trees and inanimate objects. This veneration must have originated in gratitude, fear, wonder, and belief in spirits as the cause of all good or harm. Some of the animals are sacrificed for certain gods and goddesses—the eagle of Vishnu, the swan of Brahma, the peacock of Saraswati, Hanuman, the monkey, of Rama, one serpent upholds the earth, another makes Vishnu's bed, elephants support the ends of the universe, besides one such animal being Indra's vehicle the goddess Durga or Kali rides on a tiger one of Vishnu's incarnations was partly man and partly lion (the cow is a useful animal) to the Brahman vegetarian her milk is indispensable, and he treats her as his mother. So did the Ishi of India, who often subsisted on milk and fruits and roots. • The aggressive spirit cattle are indispensable. The snake excites fear. Stones, on which the image of a serpent is carved, may be

The personal name of most Hindus denotes a material object, colour, or quality, an animal, a relationship, or a deity. The undecorated man, who cannot correctly pronounce long Sanskrit words, is content to call his child, father, brother, uncle, or mother, or sister, as the case may be. This practice survives among the higher classes as well. Appa Sahab, Anna Rao, Bahadri, Bappa Lal, Bhal Shambhu, and Jijibhai, the names of this description, with honoufific titles added. It is possible that in early society the belief in the birth of departed kinsmen lent popularity to this practice. Nothing could be more natural to a man to call a man white, black, or red gold or silver gem, diamond, ruby, or merely a stone small or tall, weak or strong, a lion, a snake, a parrot, or a dog and to name a woman after a flower or a creeper. Thus, to take a few names from the epic, Pandu means

Indian Names.

**Domestic Life**—Of the daily domestic life of the people a tourist cannot see much. He may see a marriage or funeral procession in the former he may notice how a bridegroom or bride is decorated, the latter may shock him, for a Hindu dead body is generally carried on a few pieces of bamboo lashed together a thin cloth is thrown over it and the body is tied to the frame. The Mahomedan pier is more decent, and resembles the Christian coffin. Some Hindus, however, carry the dead to the burial ground in a palanquin with great pomp. The higher castes cremate the dead others bury them. But is also the custom of the Christians, and the Parsis expose the dead in Towers of Silence.

1. **Worship** — the adoration of God, and the offering of praise and thanksgiving to Him.  
 2. **Worship** is the highest and most perfect form of devotion.  
 3. **Worship** is the foundation of all other religious duties.  
 4. **Worship** is the source of all spiritual life and growth.  
 5. **Worship** is the key to the door of heaven.  
 6. **Worship** is the power that conquers sin and Satan.  
 7. **Worship** is the strength that enables us to stand in the midst of temptation.  
 8. **Worship** is the light that guides us through the darkness of this world.  
 9. **Worship** is the joy that fills the soul and gladdens the heart.  
 10. **Worship** is the love that binds us to God and to our fellow-men.  
 11. **Worship** is the hope that sustains us in the face of adversity.  
 12. **Worship** is the faith that gives us confidence in the promises of God.  
 13. **Worship** is the power that transforms the soul and makes it a dwelling place for God.  
 14. **Worship** is the key that unlocks the treasures of heaven.  
 15. **Worship** is the power that makes us victorious over all our enemies.  
 16. **Worship** is the light that shows us the way to eternal life.  
 17. **Worship** is the joy that makes us glad in the presence of God.  
 18. **Worship** is the love that makes us love God and our fellow-men.  
 19. **Worship** is the hope that makes us confident of the future.  
 20. **Worship** is the faith that makes us trust in God.  
 21. **Worship** is the power that makes us strong in the face of temptation.  
 22. **Worship** is the light that makes us see the truth.  
 23. **Worship** is the joy that makes us glad in the presence of God.  
 24. **Worship** is the love that makes us love God and our fellow-men.  
 25. **Worship** is the hope that makes us confident of the future.  
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seen under many trees by the roadside. The principal trees and plants worshipped are the Sacred Fig or Ficus, the Banyan, the Sacred Basil, the Bilva or Wood Apple, the Ashoka, and the Acacia. They are in one way or another associated with some deity. The sun, the moon, and certain planets are among the heavenly bodies venerated. The ocean and certain great rivers are held sacred. Certain mountains, perhaps because they are the abodes of gods and Rishis, are holy. Pebbles from the Ganga and the Yamuna, which have curious lines upon them, are worshipped in many households and temples.

white, and so does *Aryana* Krishna black  
*Bhāta*, and *Makuta* a mongoose *Shunaka*  
*Shunaka* a dog *Shuka* a parrot *Shringa* a horn. Among  
the names prevalent at the present day *Hita*  
is a diamond *Hatna* or *Ratna* a jewel *Soma*  
or *China* gold *Vell* or *Bell*, in the *Dravidian*  
languages, means white metal or silver. *Man*  
are often called after the days of the week, on  
which they were born, and hence they bear  
the names of the seven heavenly bodies con-  
cerned. When they begin to assume the  
names of the Hindu deities, they practically  
enter upon a new stage of civilization. It  
is doubtful whether the *Amūlaka*'s venture  
to assume the names of the deified spirits  
worshipped by them. To pronounce the names  
of spirits sometimes bear the names of human  
beings, the reason seems to be that they are  
originally human

High-caste practices—The high caste Hindu, on the other hand, believes that the more often the name of a deity is on his lips, the more merit he earns. Therefore he delibe-

ately names his children after his gods and goddesses, so that he may have the opportunity of pronouncing the holy names as frequently as possible. These are also notorious and picturesque Shiva is happy. Vishnu is a pander Gowda is the cowherd Krishna Keshava has fine hair. Rama is a delightful first living being on the primeval waters. Ganesha is the Lord of Shiva's hosts. Dhanu is the humary that makes the day. Subrah-

manya is a brother of Ganesha. Sita is a mirror. Sairi a ray of light. Tara a star. Radha prosperity. Bhuma is she of golden ornaments. Bhama of the glowing heart. Shiva and Vishnu has each got at least a thou-

sand names, and they may be freely drawn upon and paraphrased in naming one's children, and the whole Hindu pantheon is as crowded as it is large. When a mother loses several children, she begins to suspect that some evil spirit has conspired against her and in order to make her off-spring unattractive to the powers of darkness, she gives them ugly names, such as Kera, rubbish, or Urida, dungli, or Nartoba, the mortal. Women are named after rivers, or Sarasvati, Gang, Bhagtrathi, Goda-

vart, or Kaveri, just as men are sometimes called after mountains. Many counsels young men not to choose a wife with such a name, perhaps because a river is an emblem of devi-

ousness and instability. But the names of rivers have not been discarded. The Burmans have a curious custom. If a child is born on a Monday, its name must be given with a guttural, on Tues-

day with a palatal, on Thursday with a labial, on Saturday with a dental.

Family names—When a person rises in importance, he adds to his personal name a family or caste name. It was once the rule that the title Sharma might be added to a Brahman's name, Varma to a Kshatriya's, Gupta to a Vaisya's, and Das to a Shudra's. This rule is fairly well observed in the case of the first two titles, but the meaning of the other two has changed. Das means a slave or servant, and the proudest Brahman cannot disdain to call himself the servant of some god. Thus, although Kallidas, the famous poet, was a Shudra, Ramadas, the famous guru of Shivaji, was a Brahmin. The Vaisya has made this fashion of calling one-

self a servant of some god exceedingly popular, and in Western India high caste Hindus of this sort very commonly add Das to their names. The Brahmins of Southern India add Acharya, Bhar, Bhattacharya, Upadhyaya, Mukhopadhyay, changed in Bengal into Bhattacharya. Among warlike classes, the Brahminical profession of studying and teach-

ing the sacred books has become more popular than the ancient like the Rajputs and Sikhs, the title Singh (lion) has become more popular than the ancient Varna. The Sindhi Raj, as in Giddamal, means brave and has the same force. Raja, changed into Maharaj and Raj was a political title, and is not confined to any caste. The Bengali family names, like Bose and Ghose,

name when they are baptised.

Conversions—As a rule, a child is named soon after it is born, and in the case of males the appellation is not changed. The higher Hindu castes have a separate ceremony called the name-giving ceremony performed on the twelfth day after birth. When a girl is married in these castes, the husband's family give her a new personal name. When a boy is invested with the sacred thread and is made a twice-born, his name is not changed, but when a man joins an order of ascetics his lay name is dropped, and he assumes a new name. So also when a Burman joins an order of monks or nuns, the lay name is superseded by a full name. Christian converts change their original name when they are baptised.

Dutt and Mitra, Sen and Gupta, endow one to identify the caste of their bearers, because the caste of a family or clan cannot be changed. She, chief of a guild or a town, becomes Chetty, a Vaisya title, in Southern India. Mudaliyar and Nayudu, meaning leaders, are titles which were assumed by castes of political importance under native rulers. Nayr and Menon are the titles of important castes in Malabar. Ram, Xand, Chand, are among the additions made to personal names in Northern India. Suthes like Ji, as in Ramji or Jamsheji, the Kanarese Appa, the Telugu Gari, the feminine Bai or Devi, are honorific. Preyas like Babu, Babu, Lala, Sodhi, Pandit, Raja, and the Burmese Mlung are also honorific.

Professional names—Tamil names sometimes denote a profession in some cases they might have been conferred by the old rulers. Alcheta, Kulikari, Deshpande, Chitnavis, Alchal-

nvis are the names of offices held in former times. One family name may mean a flour seller, another a cane seller, and a third a liquor seller. To insert the father's name is between one's personal and the family name is a common practice in Western India. It is rare elsewhere. When a family comes from a certain place, the suffix 'kar' or 'wallah' is added to the name of the place and it makes a family surname in Western India. Thus we may have Chhipunkars and Surattwallahs, or without these affixes we may have Bhamnagris, Malabaris and Billimoras, as among Parsis. This Vasudev Pandurang Chhipunkar would be a Hindu, whose personal name is Vasudev, father's name Pandurang, and family name Chhipunkar. In Southern India the village name precedes the personal name. The evolution of Alisam names follows the same lines as Hindu names. But Muslims have no god or goddesses, and their names are derived from their religious and secular history. These names and titles are often as long and picturesque as Hindu appellations. The agno-

mens Bakshi, Dui, Ghulam, Klawaj, Rakir, Kaz, Alunshi, Sheikh, Syed, Begum, Bibi and others, as well as honorific additions like Khan, have meanings which throw light of Muslim customs and institutions. The Parsis also have no gods and goddesses, and their personal names are generally borrowed from their sacred and secular history. Their surnames frequently indicate a profession or a place, as in the case of Hindus in Western India: Babi-

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## Big Game Hunting.

Hunting grounds are to be found throughout the length and breadth of India. Mysore and Bannur produce the finest pison, which is strictly preserved. The sportsman with his dog is to be found everywhere, provided he is prepared to pay for the game. He should be able to secure specimens of most of the game animals of India. He might well begin in January in the Central Provinces, where he would find black buck, gazelle, Algha, and a variety of small game in the open country, and where there should be no difficulty in securing some good and stout bears. In season deer and deep swampy country, where the tiger is to be found in great numbers, while tigers are not uncommon, and in mountainous districts may be met with a good number of the sportsman's good friends, black bears, ibex, and sheep. He might be fortunate enough to come across a stag that had been killed by a lion, or a stag that had been killed by a tiger. He might also find a stag that had been killed by a lion, or a stag that had been killed by a tiger. He might also find a stag that had been killed by a lion, or a stag that had been killed by a tiger.

It is to be noted that the above arms and accoutrements are not to be used for any purpose other than the sportsman's use. The sportsman should use small-bore rifles for all purposes, and should not use a larger bore for antelope and gazelle, while a 12-bore gun will be the most useful for feather game. The regulations as to the importation, etc., of arms include in Bombay the following:—

A dealer in arms and ammunition intending to import the same into Bombay must first obtain from the Commissioner of Police a license on payment of Rs 10. Arms and ammunition may be sold by dealers to Europeans (excluding Germans, Austrians and Turks), Anglo Indians (Burmese), Volunteers (not exempted under Item 13, Schedule I, Indian Arms Act), title holders, etc., in reasonable quantities, or in such quantities as Government may allow, and for the personal use of the purchaser. During the war no dealer can sell arms or ammunition to any person without a "pass" to be obtained from the Commissioner of Police. Bombay Non-exempted persons may be licensed by the Commissioner of Police to possess certain arms and ammunition. They can possess such arms and ammunition only as are mentioned in their license. Exempted persons may import arms and ammunition in reasonable quantities without a license, but the weapons, etc., must be declared before the Customs officer on duty.

[illegible]

## Routes between India and Europe.

The Indian port for the direct journey to and from Europe is Bombay. There are a few sailings each way are direct. In other weeks a special steamer runs from Bombay to Aden where it connects with the Australian Home-ward Mail and similarly, for the outward voyage, passengers and baggage and mails are transferred on alternate weeks to a steamer at Aden which proceeds thence direct to Bombay. The P & O carry the postal mails. The steamers call at Aden, Port Said, Malta, and Gibraltar. Passengers are not usually allowed to land at Aden but there is ordinarily time for them to spend some hours ashore at Port Said and Malta and a shorter time at Gibraltar. Passengers may travel westward from Port Said by any of the following methods—

By the liner to Marseilles, thence by special P & O express to Boulogne and so by Falmestone to London, or

By liner to Tilbury Dock

The arrangements for the eastward voyage are similar, in reverse order

Before the changes necessitated by the war, passengers could proceed homeward from Port Said by fast special steamer to Brindisi and thence onward by special or express train, or could continue from Port Said by liner and land at Plymouth. Both arrangements are now suspended

The P & O steamers run weekly from Bombay and London, leaving Bombay on Sunday and London on Saturday. Alternate sailings each way are direct. In some cases either by sea all the way or—and in some cases from the West via Bombay can be performed, lines of steamers by which the journey to and from Europe is Bombay. There are a few sailings each way are direct. In other weeks a special steamer runs from Bombay to Aden where it connects with the Australian Home-ward Mail and similarly, for the outward voyage, passengers and baggage and mails are transferred on alternate weeks to a steamer at Aden which proceeds thence direct to Bombay. The P & O carry the postal mails. The steamers call at Aden, Port Said, Malta, and Gibraltar. Passengers are not usually allowed to land at Aden but there is ordinarily time for them to spend some hours ashore at Port Said and Malta and a shorter time at Gibraltar. Passengers may travel westward from Port Said by any of the following methods—

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The following are the Ticket rates from Bombay to Europe —

From Bombay (or Karachi)		Single Ticket		Return Ticket (valid 2 years)	
		1st Saloon	2nd Saloon	1st Saloon	2nd Saloon
To London by sea	Rs 900	Rs 810	Rs 720	Rs 660	Rs 570
To Marseilles, Malta, or Gibraltar	Rs 840	Rs 750	Rs 660	Rs 630	Rs 540
To London via Marseilles, with ordinary rail ticket —	Rs 942	Rs 852	Rs 762	Rs 700	Rs 610
To Marseilles and returning from London by sea	Rs 984	Rs 894	Rs 804	Rs 774	Rs 684
To London via Marseilles, and including Special Express (rail and shipping car ticket)	Rs 984	Rs 894	Rs 804	Rs 774	Rs 684
Free tickets are issued to Karachi passengers by B I S N Co's steamers between Bombay and Karachi for either eastward or westward voyage. The transfer from the B I steamer to the P & O steamer, or vice-versa, is made in Bombay harbour by launch, without going ashore.					
The first saloon inside cabins on the main deck of the Mail steamers are let at a reduced rate					
First Saloon passengers are allowed 3 cwt of personal baggage free of Freight, Second Saloon passengers and servants 1½ cwt each, Children over three and under 12 years of age half these weights, Ayahs and other native servants 1½ cwt each free					

Anchor Line

The Anchor Line steamers run between Bombay and Liverpool and there are ordinarily two steamers each way per month. Westward bound steamers call at Marseilles, so that passengers can leave the ship there if they wish. Other calls are at Port Said and Gibraltar. Eastward bound steamers do not call at Marseilles. Free tickets by B I S N Co's steamers are issued to Anchor passengers to and from Bombay. The passage rates westward from Bombay are as follows —

From Bombay (or Karachi)		Single Ticket		Return Ticket (valid 2 years)	
Saloon	Native	Saloon	Native	Saloon	Native
Rs	Rs	Rs	Rs	Rs	Rs
555	248	263	900	434	395
630	298	867	1,433		
(3rd rail)		(3rd rail)		(3rd rail)	
To Marseilles, London or Liverpool and returning from Liverpool		New York via Liverpool and Glasgow			

Some stowage are made home and via Genoa, fares by this route being, Single fare to Genoa, Rs 55 and to Glasgow, Rs 600. Passengers are allowed to take free of charge, 40 cubic feet of baggage, excess being charged at the rate of a shilling per cubic foot. Dogs are carried and the charge for them is Rs 50 per animal—arrangements must be made with the ship's butcher as to feeding.

The voyage Bombay to Liverpool occupies approximately 30 days. Bombay Agents W & A Graham & Co

Ellerman's "City" & "Hall" Lines

The City and Hall Liners sail westward for the most part from Karachi, via Bombay and passengers can be booked via Marseilles and Overland either Eastward or Westward. Most of the steamers have both first and second class accommodation. Others have one class only. Passengers booking their berths in Karachi for steamers sailing from Bombay are given free tickets from Karachi to Bombay by a British India S N Co's steamer. They are transferred immediately on arrival in Bombay to the Ellerman liner if she is sailing the same day, otherwise they are landed and at the same time informed as to when the steamer for Europe sails.

Adult 1st class passengers are allowed 3 cwt of luggage free, subject to a limit in measurement of 40 feet. Children and European servants travelling first class are allowed half that quantity. Children and native servants travelling 2nd class are allowed 60 lbs. Bicycles in crates or cases are specially charged for.

Fares from Karachi or Bombay —

From Bombay or Karachi		Single Ticket		Return Ticket (valid 2 years)	
1st Saloon	Native	1st Saloon	Native	1st Saloon	Native
Rs	Rs	Rs	Rs	Rs	Rs
555	420	248	833	630	775
600	450	26	1,033	675	834
630	480	29	867	653	885
To Marseilles		2nd Saloon		2nd Saloon	
"Liverpool					
"London via Marseilles (with rail)					
"Marseilles, returning from Liverpool					

## Rubbattino

Monthly sailings from Bombay for Catania, Messina, Naples, Leghorn and Genoa, Naples on the 14th day, Naples on the 15th and Genoa on the 17th. The usual baggage allowances are made and baggage is conveyed free by sea from Port Said to London.

FARES FROM BOMBAY					
First* Saloon	Second Saloon	Indin Servant	Single		
			Return (valid 2 years)		
Rs.	Rs.	Rs.	First* Saloon	Second Saloon	Indin Servants
			Rs.	Rs.	Rs.
450	350	180	675	525	277-8
427-8	325		600		
400			806	678	
360-8	427		867	659	
546	417				

\*Rs 50 is charged for berth in a single berth cabin, Rs 75 on a return ticket. The Messageries Maritimes and Marittima Italiana have a joint arrangement by which passengers taking return tickets may travel one way by one line and back by the other.

## Natal Line

The steamers make their eastward voyages round South Africa Westward sailings from Bombay to Weymouth usually once a month during the season.  
Fares, Bombay to Weymouth (25 days)—First class, Rs 375 to Rs 420, according to class of steamer and position of berth. Cheap first class tickets are issued for berths in 2-, 3-, and 4 berth cabins.

## Bibby Line

Two (in the season, sometimes three) sailings monthly from Rangoon, via Colombo and Marseilles, to Liverpool. Fares from Rangoon and Colombo —

Single	From Rangoon		Return	From Rangoon	
	1st Class	4 months for 1st Class, available for 2 years		From Rangoon	From Colombo

Rs	Rs	Rs	Rs	Rs	Rs
To Marseilles	575	550	900	1,050	825
To London by sea returning from Liverpool	625	575	1,000	1,100	875
To London via Marseilles			1,025	1,120	925
To London by sea returning from Liverpool	650	625	1,050	1,200	975
To Marseilles returning from Liverpool by sea			950	1,075	850
To London by sea returning from Marseilles			950	1,075	850

Free 1st class tickets, valid annum—Colombo are given to passengers from South India.

Orient Line

Forthright sailings (Australian Mail) on Thursdays from Colombo to Port Said, Naples, Marseilles, Plymouth and London (Fares from Colombo —

	1st Saloon	2nd Saloon	Native Servants	From Colombo to			
	Single	Return 2 years	Single	Return 2 years	Single	Return 2 years	Return 2 years
Suez and Port Said	Rs 600	Rs 900	Rs 510	Rs 765	Rs 900	Rs 210	Rs 315
	660	990	540	810	945	210	315
	720	1 080	630	840	990	240	360
Suez, Marseilles and Gibraltar	Rs 660	Rs 990	Rs 540	Rs 810	Rs 945	Rs 210	Rs 315
	720	1 080	630	810	945	210	315
	840	1 260	690	840	990	240	360
Plymouth and London	Rs 900	Rs 1 350	Rs 660	Rs 990	Rs 1 485	Rs 240	Rs 360
	750	1 125	570	835	1 252	240	360
	690	1 035	510	765	1 147	240	360

Concessions for tickets, Talaimannar—Colombo, are given to South India passengers. Tickets are issued for native servants.

It used to be possible to obtain cheap passages, eastward or westward, in cargo ("tramp") steamers. These are now next to impossible to secure, because as the steamers are not licensed to carry passengers, passengers have to sign on as members of the crew, and the recent extension of the Employers' Liability Act then involves the ship's owners in liability to compensation to them for a variety of causes.

Indian Train Service

The distances and railway fares from Bombay to the principal centres of other parts of India are as follow —

	Miles	1st Class	2nd Class				
				Rs	Rs	Rs	Rs
Delhi, B B & C.I. Railway, via new Nagda-Muttra direct route	865	66	4	33	3		
Delhi, G I P Railway, via Agra	957	66	4	33	3		
Simla, via Delhi	1,187	103	5	52	11		
Calcutta, G I P from Bombay, via Jubbulpore & Allahabad	1,349	99	1	49	9		
Calcutta, G I P from Bombay, via Nagpur	1,223	91	14	45	91		
Madras, G I P from Bombay, via Raichur	794	68	6	34	4		
Bombay, via Delhi	1,162	91	2	47	2		

## THE SUEZ CANAL

The annual report of the Suez Canal Company published in July 1916 states that during the year the number of ships passed through the Canal was 4,802, the net tonnage for the year showing a decrease of 624,389 tons as compared with that of 1915.

The reduction of the transit dues to 6 25 per ton from the 1st January, 1915, together with the reduction of tonnage, had the effect of reducing the gross receipts, which amounted in 1914 to 122,248,858 fr., as compared with 120,650,934 fr. in 1915, and 130,422,831 fr. in 1912.

During the first seven months of 1914, the traffic through the Canal was in excess of that in 1914, the other maritime nations using the Canal remained practically stationary as compared with the preceding year.

Below are shown the 12 principal users in point of tonnage, of which six were British, three (in spite of the war) were German, two were Dutch, and one was French. Premier place, which in 1913, was held by the Ellerman Lines, is now given to the Peninsular and Oriental and British India combination, though actually the fusion between these two companies only took effect in October 1914 —

Owners	Tonnage	Voyages
Peninsular and Oriental	12,29,000	465
British India	970,000	
Ellerman Lines —		
Hyll Line	625,000	
City Line	367,000	
Bucknall Lines	341,000	302
Others	56,000	
Alfred Holt & Co, (Ocean and China Mutual)	1,159,000	241
Ilansa Line	642,000	156
Nederland Stoomvaart Maatschappij	631,000	135
Westergies Maritiemes	590,000	163
Rotterdam Lloyd	564,000	140
Hamburg Amerika	537,000	120
Cyzer, Irvine, and Co	480,000	140
Norddeutscher Lloyd	424,000	70
T and J Harrison	403,000	82
Orient	338,000	46





## Travel in India.

### Specimen Tours

A number of specimen tours in India are given below. They are taken from one of the publications of the Club and soon, from whom further information may be obtained. The traveller

the ancient Moslem capital of the Province, containing fine examples of Mahommedan and Jain architecture, thence to Abu for the famous Jain temples of Dilwara, and on to Ajmer, Jaipur and Agra. The other, by the Great Indian Peninsula Railway carries the tourist over the Western Ghats by a superb mountain railway to Gwalior, whose rock fortresses rise like a giant battlement from the plain, and so on to Agra. Of the quietest of the Raj Mahal, Agra Fort, and the deserted city of Fatehpur Sikri were supererogatory to speak. Another easy stage leads to Delhi, that amazing collection of cities, dominated by the little Ridge where British valour kept the mutinous hordes at bay, and finally drove them from the city by a feat of arms unsurpassed in history. Then from Delhi the last Indian line leads comfortably to Benares, Lucknow and Calcutta, with the opportunity of an excursion to Cawnpore, if the spirit moves. The great charm of the Grand Tour is that it reveals the best that India can show. This route has the additional advantage that it fits in with any digressions which the time and purse of the traveller may permit. No one who can spare the time should fail to push northwards from Delhi to Peshawar, where the power of the army keeps watch and ward over the Khyber, and up the dread Pass to the cleft where the fort of Ali Masjid bars the way to all invaders. Calcutta is the best starting point for Darjeeling, though unfortunately the magnificent mountain panorama visible from there is often obscured at this season by mists. Then from Calcutta the natives open a fine service of mail steamers leads to Burma and one of the unforgettable memories of the East is a voyage down the Irrawaddy from Bhamo or Mandalay to Rangoon either direct from Calcutta, or via Burma, is an easy route to Madras, and by way of Madras and Trincomopoly, with their peerless Hindu temples back to Bombay, or on through Tuticorin to Colombo. But indeed the possibilities of expanding this tour are endless. Bombay is the best centre for the rock temples of Elephanta, Kanheri, Karli, Ellora and Ajanti. Calcutta is only a short distance from Puri, the one Indian temple remarkable Hindu temple in the country. From Calcutta also start the river steamers which thread the steamy plains of Bengal and run to the tea gardens of Assam.

**The Grand Tour**—People coming to India for the first time so often ask—“Where shall I go?” Well, wherever else the tourist may go, whatever else he should leave out, he should follow the beaten track, but the visitor who shuns any part of the orthodox journey across India misses what nothing else can repay. Bombay is by far the most convenient point of departure, for here “the world and steamers wait,” here is one of the finest cities in the British Empire, and here the traveller can best complete his outfit and arrangements. From Bombay stretch northwards the two great trunk lines of India. One, the Bombay, Baroda and Central India Railway, leads through Ahmedabad, the pleasant garden of Gujarat to Ahmedabad,

the touring season, which extends from November to March, there is the attraction of a perfect climate. It is never very hot, in the North indeed it is really cool. It is always fine and fresh and bracing. If there is one country in the world to which that elusive term applies, here we have at the season when the tourist arrives the real “Indian summer.” Then there is its infinite variety. India is in no sense a nation and never will be. Its peoples are wide as the Poles asunder, each has its own art, its own architecture, its own customs and its own civilisation. A certain superficial resemblance runs through each, beneath lies a never-ending variety which age cannot

with her not custom stale. The Grand Tour—People coming to India for the first time so often ask—“Where shall I go?” Well, wherever else the tourist may go, whatever else he should leave out, he should follow the beaten track, but the visitor who shuns any part of the orthodox journey across India misses what nothing else can repay. Bombay is by far the most convenient point of departure, for here “the world and steamers wait,” here is one of the finest cities in the British Empire, and here the traveller can best complete his outfit and arrangements. From Bombay stretch northwards the two great trunk lines of India. One, the Bombay, Baroda and Central India Railway, leads through Ahmedabad, the pleasant garden of Gujarat to Ahmedabad,

Twenty years ago, a tour in India was possible only to the wealthy, the leisured and those who had friends in the country. The cost of the journey was very high, the methods of transportation were very slow, and the facilities for travel were so indifferent that it was a bold man who consigned himself to the mercies of the country without a sheet of letters of introduction. Now the mail which in peace reaches Bombay in thirteen and a half days, and the passenger can travel by the same route and with the same speed as the mail. A dozen lines have covered the sea route between Europe and India and Ceylon with a plume of regular services. The Indian Railways provide facilities on the trunk lines unsurpassed by the *trans-de-lux* of Europe, and the Indian hotel has grown into a really comfortable caravan

[illegible]

2nd Class	1st Class	Steamer
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Rs a	Rs a	FROM CALCUTTA TO BOMBAY
		<i>Via the North-West Provinces</i>
71 10	143 1	Tour IX—From Calcutta via Benares, Lucknow, Cawnpore, Tunda, Agra, Delhi, Rewari, Jaipur, Ajmer (for Udaipur), Abu Road (for Me Abu), Ahmedabad and Baroda to Bombay
67 0	133 14	Tour X—From Calcutta via Benares, Moghal Serai, Cawnpore, Tunda, Agra, Delhi, Rewari, Jaipur, Ajmer (for Udaipur), Abu Road (for Me Abu), Ahmedabad and Baroda to Bombay
50 2	118 3	Tour XI—From Calcutta via Benares, Moghal Serai, Cawnpore, Tunda, Agra, Gwalior and Itarsi to Bombay
66 14	133 8	Tour XII—From Calcutta via Benares, Moghal Serai, Cawnpore, Delhi, Multara, Agra, Gwalior and Itarsi to Bombay
83 13	167 7	<i>Extensions, Via Southern India to Colombo</i>
62 10	130 7	Tour XIV—From Bombay via Poona, Hyderabad, Wadi, Rajchur, Madras, Tanjore, Trichinopoly, Madura, Dannushkodi, and Talai-Tou XV—From Bombay via Poona, Hyderabad, Wadi, Gunthakal, Bangalore, Erode, Trichinopoly, Madura, Dannushkodi, and Talai-mannar to Colombo
58 8	122 7	<i>Extensions to above Tours</i>
15 10	31 5	From Ajmer to Udaipur and return
20 15	41 13	From Ajmer to Mount Abu and return, one seat in Tonga (This excursion is strongly recommended, the scenery being very beautiful)
29 15	41 13	From Delhi to Lahore and return via Umballa and Amritsar
33 11	67 5	From Delhi via Bhatinda, Ferozepore to Lahore, returning via Amritsar
60 0	90 0	From Calcutta to Kandy and return (14 days)
2 10	5 4	From Kurda Road to Puri (Jagannath and return)

(All fares subject to change without previous notice)

## An Indian Glossary.

ABRAH—Dyke of liquors and drugs  
 AIV—A timber tree, *LEPISALATA TOKREYOS*  
 AIV I KRAH—A comprehensive account of India, under the Mughal Emperor Akbar, (compiled in 1590 by Abul Fazl)  
 AIVT—A subordinate executive official employed to Hindus of the clerical class  
 AVICET—A dam or weir across a river for irrigation purposes, Southern India  
 AVS—The early rice crop, Bengali, syn. Ahu, Assam  
 AVYVI—An incantation or Vishnu

BAHUT—A common thorny tree, the bark of which is used for tanning, *AGACIA ARABICA*  
 BAGHTA—A native boat (Bugallow)  
 BAHAGI—A Hindu religious mendicant  
 BAHRA—The butrush millet, a common food grain, *PERKISESTH TYPHODEVUM*, syn. canbu, Madras  
 BAYD—A dam or embankment (Bund)  
 BAYDU—A dam (Bund)  
 BAYVAV—A species of fig-tree, *FICUS INDICA*  
 BASTI—(1) A village, or collection of huts, (2) A Jain temple, Kanara

[illegible]

- Dart Dhurrie**—A rug or carpet, usually of cotton, but sometimes of wool.
- Dargah**—The title of officials in various departments, now especially applied to subordinate controlling Officers in the Police and Jail Departments.
- Darwan**—A door-keeper.
- Darwaza**—A gateway.
- Debottar**—Land assigned for the upkeep of temples or maintenance of Hindu worship.
- Dhodar**—A cedar, Cedrus Libani or C.
- Dhodra**.
- DEPUTY COMMISSIONER**—The Administrative head of a District in non-regulation areas corresponding to the Collector in Regulation Provinces.
- DEPUTY MAGISTRATE AND COLLECTOR**—A subordinate of the Collector, having executive and judicial (revenue and criminal) powers, equivalent to Extra Assistant Commissioner in non regulation areas.
- Desai**—A revenue official under native (Maratha) rule.
- Desn**—(1) Native country (2) the plains as opposed to the hills Northern India (3) the plateau of the Deccan above the Ghats.
- Desmukh**—A petty official under native (Maratha) rule.
- Dev**—A deity.
- Dhar**—A tree, BUTEA FRONDOSA, with brilliant salmon coloured flowers used for dyeing, and also producing a gum, syn palas, Bengal, Chitkul, Central India.
- Dharmasala**—A charitable institution provided as a resting-place for pilgrims or travellers, Northern India.
- Dhatra**—A stupefying drug, DATURA.
- Dhekri**—Name in Northern India for the lever used in raising water, syn picotah.
- Dhot**—The loincloth worn by men.
- District**—The most important administrative unit of area.
- Division**—(1) A group of districts for administrative and revenue purposes, under a Commissioner, (2) the area in charge of a Deputy Conservator of Forests, usually corresponding with a (revenue) District, (3) the area under a Superintendent of Post Offices, (4) a group of (revenue) districts under an Executive Engineer of the Public Works Department.
- Dwary**—The chief minister in a Native State.
- Dwary**—Civil, especially revenue, administration, now used generally in Northern India of civil justice and Courts.
- Dowb**—The tract between two rivers, especially that between the Ganges and Jumna.
- Dwarp**—A crop grown without artificial irrigation.
- Dry rate**—The rate of revenue for unirrigated land.
- Dyn**—A valley, Northern India.
- FEKA**—A small two-wheeled conveyance drawn by a pony, Northern India.
- DARF**—ASSISTANT COMMISSIONER—See Deputy Magistrate and Collector.
- FAJDA**—ANNUAL PROVISION FROM REVENUE TO MEET DIRECT FAMILIAR EXPENDITURE, OR THE COST OF CERTAIN CLASSES OF PUBLIC WORKS, OR TO AVOID DEBT.
- Farman**—An imperial (Alughal) order or grant.
- Faujdar**—Under native rule, the area under a Rajdar or subordinate governor, now used generally of Magistrates, Criminal Courts.
- FINANCIAL COMMISSIONER**—The chief controlling revenue authority in the Punjab, Burma and the Central Provinces.
- Gadri, Gadi**—The cushion or throne of (Hindu) royalty.
- Ganja**—The unfertilised flowers of the cultivated female hemp plant, CANNABIS SATIVA, used for smoking.
- Gaur**—Wild cattle, commonly called 'bison', BOE GAVRUS.
- Gavay**—A species of wild cattle, BOS FRONTALIS, domesticated on the North-East Frontier, syn mithan.
- Ghat, Ghant**, (1) A landing-place on a river, (2) the bathing steps on the bank of a tank, (3) a pass up a mountain, (4) in European usage, a mountain range in the last sense especially applied to the Eastern and Western Ghats.
- Ghatwal**—A tenure-holder who originally held his land on the condition of guarding the neighbouring hill passes (ghats), Bengal.
- Ghi, Ghee**,—Clarified butter.
- Gingelly**—An oilseed, SESAMUM INDICUM, syn til.
- Gopray**—A gateway, especially applied to the great temple gateways in Southern India.
- Gorap**—Light alluvial soil, Gujarat.
- Gosain, Goswami**—A (Hindu) devotee, lit one who restrains his passions.
- Gosha**—Name in Southern India for 'caste' women, lit 'one who sits in a corner', syn parda.
- Grass**—A kind of pea, CICER ARIETINUM, in Southern India the pulse DOLOCHOS BIFLORUS is known as horse gram.
- Gumamteed**—(1) A class of Native States in Central India, (2) A class of railways.
- Gur, Goor**—Crude sugar, syn jaggery, southern India, tanyet, Burma.
- Gural**—A Himalayan goat antelope, CEVRAS GORAL.
- Gurur**—(1) A Hindu religious preceptor, (2) a schoolmaster, Bengal.
- Hakim**—A native doctor practising the Mohammedan system of medicine.
- Halkhor**—A sweeper or scavenger, lit one to whom everything is hawl food.
- Hari**—Current Applied to coin of Native States, especially Hyderabad.
- Hilsa**—A kind of fish, CLUPEA HILSA.
- HIT**—An iron pinnacle placed on a pagoda in Burma.

[illegible]

- AMARAT**—(1) formerly a considerable tract of country, (2) now a village or part of a village for which a separate agreement is taken for the payment of land revenue, (3) a department of revenue, *eg* right to catch elephants, or to take stone
- AMARATKARI**—A subordinate revenue official, Bombay
- AMANT**—The head of a Hindu conventual establishment
- AMARAVI**—A title borne by Hindus, rank- ing above Raja
- AMASER**, mahasi—A large carp, BARBUS TOR (lit. 'the big-headed')
- AMBA**—A tree, *BASSIA LATIFOLIA*, producing flowers used (when dried) as food or for distilling liquor, and seeds which furnish oil
- AMADAN**—An open space of level ground, the park at Calcutta
- AMOR WORKS**—Irrigation works for which separate accounts are kept of capital, revenue, and interest
- AMARTAB**—An elementary Mohammedan school
- AMARTAZAR** (revenue payer)—(1) The term applied in the Central Provinces to a co-sharer in a village held in ordinary proprietary tenure (2) a cultivator in the Chamba State
- AMARTAVAR**—The officer in charge of a taluka, Bombay, whose duties are both executive and magisterial, *syn* tahasiladar
- AMADAR**, or mandapam—A porch or pillared hall, especially of a temple
- AMAKHOR**—A wild goat in North Western India, CYBBA FALCONBERI
- AMASUD**—A mosque Janna Masjid, the principal mosque in a town, where worshippers collect on Fridays
- AMASAD**—Seat of state or throne, Mahomedan, *syn* gaddi
- AMAR**—A Hindu shrine or conventual establishment
- AMARTVI**—A person learned in Muhammadan law
- AMAR**—Sanskrit term for delusion
- AMARA**—A religious festival or fair
- AMINAB**—The niche in the centre of the western wall of a mosque
- AMBAR**—Steps in a mosque, used as a pulpit
- AMBAR**—A pillar or tower
- AMOR WORKS**—Irrigation works for which regular accounts are not kept, except, in some cases, of capital
- AMOSOO**—Lit. 'season', but generally applied to the rainy season, or to the regular moisture laden current of air prevailing at certain seasons
- AMASAT**, motissil—The outlying parts of a district, Province or Presidency, as distinguished from the head-quarters (*Sadr*)
- AMADADAR**, muscadum—A representative or headman
- AMARTAB** (conventual mubhtar)—A class of legal practitioner
- AMARTAB**—A palanquin or litter
- AMART**—The betel vine, FIRE BETEL.
- AMART**—A demon or spirit, Burma
- AMART**—A title borne by Muslims, corresponding roughly to that of Raja among Hindus
- AMART**, nazarana—A due paid on succession or on certain ceremonial occasions
- AMART ASSERTS**—(1) In Northern India, the rent or share of the gross produce of land taken by the landlord, (2) in Madras and Lower Burma, the difference between the assumed value of the crop and the estimate of its cost of production
- AMART**—Broad type woven across bedsteads instead of iron slats
- AMART**—Pressed fish or salted fish paste, largely made and consumed in Burma
- AMART**—An antelope, *BOSCAPRUS TRAGO-CAMERUS*
- AMART**, neem—A tree, *ALBIS AZDIRAOMTA*, the berries of which are used in dyeing
- AMART**—A title borne by the ruler of Hyderabad State
- AMARTAB**—A sub-division of a Native State, corresponding to a British District, chiefly in the Punjab and Bhopal
- AMART**—An offence for which the culprit cannot be arrested by the police without a warrant
- AMART**—A class of tenants with few statutory rights, except in Oudh, beyond the terms in their leases or agreements
- AMART**—A term formerly applied to certain Provinces to show that the regulations of full code of legislation was not in force in them
- AMART**—A raving, watercourse, or drain
- AMART**—A class of tenants with special rights in Central Provinces, in United Provinces
- AMART**—Unasked rice
- AMART**—A troop of horses among the Marathas
- AMART**—A tracker of strayed or stolen animals
- AMART**—A tenant in Hyderabad State
- AMART**—(1) A foot soldier, (2) in Assam formerly applied to every tree made above sixteen years
- AMART**—A palanquin or litter
- AMART**—The betel vine, FIRE BETEL.







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healthiness of the southern site, the medical and sanitary advantages of which are overwhelming when compared with those of the northern site."

#### Report on Northern Site—In the same

month the Town-Planning Committee presented their second report, which dealt with the northern site. This had been elicited by the fact that in December, 1912, Sir Bradford Leese, an engineer with a distinguished Indian career, had read a paper before the Indian section of the Royal Society of Arts in London, in which he set forth plans for building the new capital on the northern site and producing a fine water effect by a treatment of the river Jumna. This paper aroused considerable attention in England and its publication synchronised with some letters and articles in the press in India expressing a preference for the northern site. The latter voiced a natural attraction to the north site which the Committee themselves experienced on their first visit to Delhi, and encouraged some preliminary and later abandoned. The Town Planning Committee, therefore, undertook to review, in greater detail, the arguments for and against the northern site. They came to the conclusion that—"The soil is poor on the northern site as compared with the southern. The southern site is already healthy and has healthy surroundings. The northern site even after expenditure on sanitary requirements will never be satisfactory. If the northern site is to be made healthy, this involves going outside the site itself and making the neighbourhood healthy also. The building land to the south is generally good. On the north to be used at all it has in places to be raised at considerable cost. There is no really suitable healthy site for a cantonment in proximity to a city on the northern site. The exigencies of siting in the requirements to the limited area of the northern site endanger the success of a lay-out as a whole and tend to make for cramping and bad arrangement. The result of placing a city on the northern site appears to the Committee to be the creation of a bad example in place of a good one."

#### Final Town-Planning Report—The final

report of the Town-Planning Committee, with a plan of the lay-out, was dated March, 1913. The central point of interest in the lay-out, which gives the motif of the whole in Government House, the Council Chamber and the large blocks of Secretaries. This Government centre has been given a position at Rashtrapati Nagar near the centre of the new city. Advantage is taken of the height of this hill and it is linked with the high ground behind so as to appear a spur of the ridge itself. Behind the hill a raised platform or forum would be built. This will be linked by the large blocks of Secretaries buildings and terminated at its western end by the mass of Government House and the Council Chamber, with its wide flight of steps, portico and dome. The forum will be approached by a wide and easy gradient on both its northern and southern sides. The main access to this forum the last of the main buildings centres on the north-west gate of the main avenue nearly due east of Government House.

Looking from the eastern end of the forum where the broad avenue enters the Government centre and where the great stairways are set, the view is towards the east. "Right and left the roadways go and weld into one the empire of to day with the empires of the past and unite Government with the business and lives of its people."

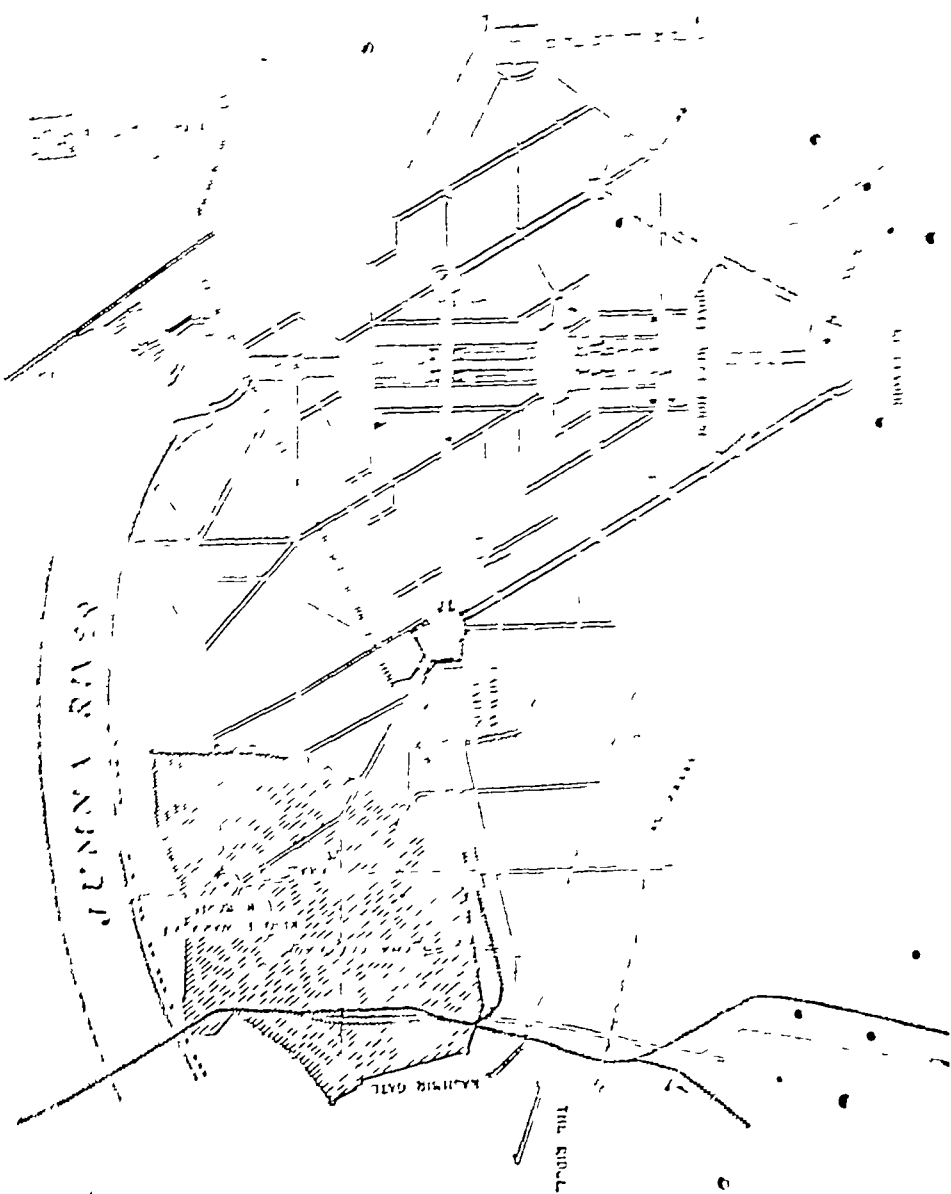
Behind Government House to the west will be its gardens and parks flanked by the general buildings belonging to the Vice-regal estate. Beyond these again, on the ridge itself, will be a spacious amphitheatre to be made out of the quarry from which much of the stones for roads and buildings may be cut. Above this and behind it will be the reservoir and its tower which will be treated so as to break the sky line of the ridge. To the east of the forum, and below it, will be a spacious forecourt defined by trees and linked on to the great main avenue or parkway which leads to Dillipatti. Across this main axis, and at right angles to it, will run the avenue to the railway station. This will terminate in the railway station, the post office and business quarters at its northern end, and in the Cathedral at its southern extremity.

To the south-east will be the park area in which stand the ancient monuments of Salar Jung's Akbar and the Lodhi tombs. This area can be developed gradually as the city expands and has need of public institutions of various kinds. The axis running north-east from the Secretaries buildings to the railway station and towards the Jama Masjid will form the principal business approach to the present city. At the railway station a place will be laid out around which will be grouped the administrative and municipal offices, the banks, the shops and the hotels. On this place the post office is placed in symmetrical relation to the railway station.

The processional route will lead down from the railway station, due south to the point where it is intersected by the main east to west axis. Here round a place will be gathered the buildings of the Oriental Institute, the Museum, the Library and the Imperial Record Office. To the south-west of the railway station will be the houses of the local administration and the residences of the European clerks.

Due south of the forum the residence of the Commander-in-Chief will be placed, round about the Vice-regal estate and the forum lies a Member of Council, the Secretaries and other officials of the Government of India. To the south-west of Government House lies the club. To the south of the club a low ridge divides the tract into two portions. That to the west is well adapted for a golf course, while the eastern side is assigned for a race-course, the ridge itself offering unusual facilities for locating stands and seeing the races.

**Communications—**The avenues range from 300 feet to 600 feet with the exception of the main avenue east of the Secretaries buildings where a parkway width of 450 feet has been allowed. The principal avenues in addition to the main avenues are those running at right angles to the main east to west axis.



Plan of the New Imperial Capital

Others form part of a system running from the amphitheatre to the railway station and the Commander-in-Chief's residence, and from both the latter to the commemorative column, lying on the axis between Indraprastha and Government House is the focal point of the roads and avenues on the parkway.

A lake which can be obtained by river treatment is shown on the plan. The lay-out has been made independent of the water effect, but the Committee think that its ultimate creation will enhance enormously the beauties and general amenities of the new capital and it should and would become an integral portion of the design now submitted.

The report contains lengthy recommendations concerning water-supply, drainage, sewage system, parks and communications. It is imperative, it says — "that a complete scheme of railway arrangements designed to serve the whole of the capital, both old and new, should be an essential feature of the lay-out of the Imperial City, and this important matter should not be left to be settled when it is too late to deal with it." The main lines of the route to Government House is to be along a sloping way (at a gradient of one in 22½) which leads from a semi-circular plaza, the "Great Court" to the level of the Secretariat buildings. At the summit of this sloping way is the "Government Court", a space of about 1,100 feet in length, and 400 in breadth, flanked to the north and south by the two blocks of Secretariat buildings. These buildings have been designed by Mr. Baker and the aggregate cost will be some £750,000. According to the design the eastern end of each block is marked by deep loggias looking out over the central vista. In the centre of each block is a dome. In the case of the north block this marks an entrance hall in the south block it surmounts a Conference hall with a suite of cloak and reception rooms. Each block contains three doors. In the lowest are motor garages, go-downs, and record rooms in the middle floor are the offices of Members, Secretaries and other officers in the top floor are clerks' rooms. An essential feature of the design, and one which sets the character of the whole building, is the provision of loggias and recessed gateways or courts situated in the interior of the blocks. The verandahs familiar in Indian buildings are altogether absent. The architect relies for control of temperature on thick external walls with an air space inside, together with the thick window shutters adopted so widely in Southern Europe and the wide *chajja* characteristic of Oriental buildings.

Between the north and south Secretariat blocks, is the way into the "Viceroy's Court", the raised causeway already referred to — leading up to Government House. The Court is about 600 feet in breadth and 1,300 feet in length, it will be treated with grass and water-ways and low trees and should form a dignified approach to the final group of buildings. At a point midway in the causeway, roads lead off to the north and south, forming alternative lines of approach to Government House. One thus reaches the portico of Government House. This portico is raised some twenty feet above the level of the surrounding ground.

**Temporary Capital**—For the use of the Government of India during the five years the building of the new capital is expected to occupy a period that will have to be extended owing to the conditions created by the war — in it has been selected along the Allpur Road, between the present civil station of Delhi and the Ridge. The early idea that many of the officials should live under canvas had to be given up, and there are now temporary offices and residences. The architectural and method of construction are similar to those adopted in the exhibition buildings at Allahabad in 1910, but the buildings are expected to outlast the transitional period for which they are intended. They will subsequently be an asset of some value, the site they occupy becoming a suburb of the capital.

**Chief Commissioner Appointed**—On October 1, 1912, by proclamation, there was constituted an administrative enclave of Delhi under a Chief Commissioner, Mr. W. H. Bailey, I.C.S. The Delhi district of the Punjab, from which this enclave was entirely taken, consisted of three taluqs or subdivisions and the enclave was formed by the central taluq, that of Delhi, and by such part of the southern taluq, Ballabgarh, as was comprised within the limits of the police post of Shahpur. Delhi Province has an area of 325 square miles to which has recently been added an area of 45 square miles.



Chaqueux may be sent to the Secretary, Indian Church Aid Association, Church House, Westminster, S W and crossed Lloyds Bank, St James's Street, S W

A Roman Catholic Cathedral is also projected and Father Paul Hughes, O M C, has been touring India collecting money for the Cathedral Fund

**Sanitary Improvements**—While the work on the new city has been going forward various improvements in the existing Delhi have been carried out and the sanitary conditions in particular have been much improved. The dykes should be established at Delhi and in connection a conference of Chiefs and Political Officers was held at Delhi, in March, at which the Viceroy presided. It was subsequently announced that subscriptions offered towards the college amounted to about ten and a half lakhs, various recurring sums were promised, and the Government of India also promised to recommend the Secretary of State a grant of Rs 50,000 a year. Thus the whole capital would come to 12½ lakhs. The proposal is still under consideration

There are about 365 Share and Stock Brokers in Bombay. They carry on business in the 'Brokers' Hall, bought in 1899 from the funds of the Share and Stock Brokers' Association formed to facilitate the negotiations and the sale and purchase of joint stock securities promoted throughout the Presidency of Bombay. Their powers are defined by rules and regulations framed by the Board of Directors and approved by the general body of Brokers. The Board has the power to fix the rates in times of emergencies. It is composed of Sir Shapurji Broacha (Chairman), Mr Parbhudas Alvandas (Vice Chairman), Mr Manojee Pestonji Bhaurchia, Mr Shapurjee Sorabjee Dabholwalla, Mr Nasserwanji Pherozeshah Karani, Mr Nagji Motichand, Mr Hiranand Vasani, Mr Bhaidas Goculdas, Mr Vaidin Pannuchand and Mr Jamnadas Morari (Secretary).

At first the admittance fee for a broker was Rs 5 which was gradually raised to Rs 1,000. There are two classes of Exchange Brokers, Europeans and Indians, the latter being certified for recognition by the native Stock Exchange Business in Government Paper and all other Trustees' Authorised Securities is carried on under the rules of the Bombay Stock Exchange, but in the street outside the hall

For many years the Calcutta Share Market had its meeting place in various gullies in the business quarter and was under no control except that of established market custom. In 1908 the Calcutta Stock Exchange Association was formed, a building was leased in New China Street now called Royal Exchange Place a representative committee was formed, and the existing trade customs were focused into rules drawn up for the conduct of business. Admittance as a member of the Stock Exchange is by vote of the committee, and the entrance fee is at present

## STOCK EXCHANGES.

Rs 500. The market custom differs very materially from that of most other Stock Exchanges since there are no settlement days, delivery is due the second day after the contract is passed and sales of securities are effected for the most part under blank transfers. Another difference in procedure as compared with the London Stock Exchange is that there are no "jobbers" in the Calcutta market. The Dealers who take their place, more or less, are not compelled to quote a buyer's and a seller's rate and are themselves Brokers as well as dealers, calling upon the Banks and other clients and competing with Brokers

There are about 160 members, besides outsiders, Brokers, the former consisting of European, Jewish, Marathi, and Bengalee firms. The Marathias predominate. The volume of bond and share Investment business is comparatively small and insufficient for the number of Brokers. The principal business transacted on the Calcutta Stock Exchange is connected with Tea Companies registered in India, Miscellaneous Industrial concerns (such as Paper, Flour, Sugar) Railway and Transit Companies and Debentures, the latter comprising those of Industrial concerns and Trustees Investment Securities, namely Municipal and Port Trust Debentures. When special active operations are being actively engaged in, which frequently take the form of forward contracts for delivery in three months' time, the value of securities changing hands may aggregate as much as a crore of rupees per month, but since the trade is not constant and one year differs very much from another, it would be difficult to estimate what the average annual turnover would amount to. The association has an honorary secretary and is not at present affiliated to the Bengal Chamber of Commerce



Land Revenue Administration Provincial Reports for Lower Provinces (Bengal), Bihar and Orissa, Assam, United Provinces, Punjab, Central Provinces and Berar, Madras and Malabar  
Report on Land Revenue Administration, Land Records, Settlement Operations, Allotment of Land Act, &c, for North-West Frontier Province  
Madras Survey, Settlement and Land Records Department Report  
Reports on Land Records Departments for Provinces, and Punjab  
Report on Settlement Operations, Punjab  
Reports on Survey and Settlement Operations, Bengal and Assam  
Reports on Operations of the Land Records and Settlement Departments, Central Provinces and Berar  
Report of the Talukdars Settlement Officer, Provincial Reports on the Administration of Estates under the Court of Wards  
Report on the Punjab Canal Colonies —  
Separate Revenue (Salt, Excise, &c) —  
Salt Department Reports, Northern India, Madras, Bombay, Sind, Bengal, Burma, Bihar and Orissa  
Excise Report for each Province  
Opium Department Reports, United Provinces and Bombay  
Stamp Department Report for each Province  
Registration Department Report for each Province  
Income Tax Report for each Province  
Agricultural and Veterinary —  
Report on the Progress of Agriculture in India  
Report on the Agricultural Research Institute and College, Pusa  
Bulletins of the Agricultural Research Institute, Pusa, and of the Provincial Departments of the Department of Agriculture  
Memoirs of the Department of Agriculture  
Proceedings of the Board of Agriculture  
Agricultural Journal of India (quarterly)  
Report of the Department of Agriculture in each Province  
Reports on various Agricultural Stations, Experimental Farms, and Botanic Gardens  
Season and Crop Report for each Province  
Agricultural Statistics of India.  
Area and Yield of certain Principal Crops  
Report on Production of Tea in India  
Report on Tea Culture in Assam  
Statistics compiled from the Reports of Provincial Civil Veterinary Departments  
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Orissa

Statistical Abstract relating to British India (Parliamentary Paper)  
Statistics of British India —  
Part I — Industrial (Factories, Mills, Mines, &c)  
Part II — Commercial (Foreign Trade and Shipping, &c)  
Part III — Commercial Services (Post Office, Railways, Telegraphs, &c)  
Part IV (a) — Finance and Revenue (Paper Currency, Coinage, Public Debt, &c)  
Part IV (b) — Finance and Revenue (Principal Heads or Revenue, Salt, Opium, &c)  
Part V — Area, Population, and Public Health (Area, Population, and Immigration, Births and Deaths, Vaccination, &c)  
Part VI — Administrative and Judicial (Administrative Divisions, Civil and Criminal Justice, Registration, Police, Jails, &c)  
Part VII — Educational (Education, Printing Presses, and Publications)  
Part VIII — Local Funds (Municipalities, Local Boards, and Port Trusts)  
Census Reports (Decennial), India and Provincial  
Administration Reports, Madras, Bombay, Coorg, United Provinces, Punjab, Bengal, Central Provinces and Berar, Bihar and Orissa, Assam, Andaman and Nicobar Islands, Civil and Military Station of Bangalore, Ajmer-Merwara, Baluchistan, North-West Frontier Province, Delhi  
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Report on Jails for each Province  
Reports on Police, for each Province, and for Bombay Town and Island, Calcutta, and Rangoon  
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Provincial Reports on Maritime Trade and Customs (including working or Merchandise Mark Act) for Bengal, Bihar and Orissa, Bombay, Sind, Madras, and Burma  
Accounts of Sea-borne Trade (monthly and for Calendar Year)  
Accounts of Land Trade (monthly)  
Annual Statement of Coasting Trade of British India  
Report on the Trade and Navigation of Aden  
Accounts of Trade carried by Rail and River in India  
Report on Inland, Rail-borne, or Rail and River-borne Trade for each Province  
External Land Trade Reports for Bengal, Bihar and Orissa, Assam, Burma, United Provinces, Punjab, and British Baluchistan  
Indian Trade Journal (weekly)  
List of Joint-stock Companies in British India and Mysore  
Reports on the working of the Indian Companies Act (Provincial)  
Report on the working of the Indian Factories Act for each Province  
Report of the Chief Inspector of Explosives

Schedule II—(Import Tariff)

The customs revenue is mainly derived from the general import duty, certain special import duties such as those on arms, liquors, sugar, petroleum and tobacco, and an export duty on rice. The general rate of duty on commodities imported into British India by sea has been 5 per cent *ad valorem*. Cotton was exempted in 1861 when the general duties were received, in December 1891 a 5 per cent duty *ad valorem* was imposed on all imported cotton goods and yarns, while an excise duty of 5 per cent was imposed on all yarns of counts above 20 spun at power mills in British India, in February 1890 cotton yarns and threads imported or manufactured in India were freed from duty, while a unit rate of 3 pence *ad valorem* duty was imposed on all woven cotton goods. The products of the jute and flax industries in India and China are exempted from duty. The rate on rice was 10 pence *ad valorem* (10 pence per cwt) for rice imported from duty free countries and 15 pence per cwt for rice imported from other countries. *Ad valorem* duties (50 per cent) were imposed on all imports for the protection of Indian industries. It was also imposed on the import of printing materials, food grains, coal, raw cotton, raw wool, cotton twists and yarn and sewing machines, gold, silver, jewelry, glass, iron and steel, and various other commodities. On the 1st of January 1896-97, the first year of the existing arrangements, the customs revenue amounted to Rs. 15 lakhs and in 1902-03 Rs. 4.26 lakhs. Last year it reached Rs. 7.87 lakhs. The gross revenue from imports, with excise, was Rs. 8.07 lakhs, a decrease of 14 per cent as compared with the customs revenue (Rs. 9.36 lakhs) realised in the previous year.

No	Names of Articles	Per	Rate per duty
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[illegible]

Schedule IV Las b en revised.

## Schedule II—(Import Tariff)—continued

No	Names of Articles	Per °	Rate of Duty.
10	<p>Arms, Ammunition, and Military Stores—<i>could</i></p> <p>Machines for capping cartridges—<i>could</i></p> <p><i>Exception II (g) Morris tubes and patent ammunition, etc—could</i></p> <p>(c) Swords and revolvers which are certified by an Inspector-General of Police to be part of the ordinary equipment of members of the Police force under his charge</p> <p>(d) Swords forming part of the equipment of native commissioned officers of His Majesty's Army,</p> <p>(e) Swords for presentations as army or volunteer prizes,</p> <p>(f) Arms, ammunition, and military stores imported with the sanction of the Government of India for the use of any portion of the military forces of a Native State in India which may be maintained and organised for Imperial Service,</p> <p>(g) Morris tubes and patent ammunition when imported by officers commanding British and Native regiments or volunteer corps, for the instruction of their men</p> <p><i>Proviso 1</i>—No duty in excess of 10 per cent <i>ad valorem</i> shall be levied upon any of the articles numbered 1 to 10 in the foregoing list when they are imported in reasonable quantity, for his own private use, by any person lawfully entitled to possess the same</p> <p><i>Proviso 2</i>—When any articles which have been otherwise imported, and upon which duty has been levied or is leviable under numbers 1 to 10, are purchased retail from the importer by a person lawfully entitled as aforesaid, in reasonable quantity for his own private use, the importer may apply to the Customs Collector for refund or remission (as the case may be) of so much of the duty thereon as is in excess of 10 per cent <i>ad valorem</i> and if such Collector is satisfied as to the identity of the articles and that such importer is in other respects entitled to such refund or remission he shall grant the same accordingly</p> <p>Gunpowder, all sorts</p> <p>All other sorts of arms, ammunition, and military stores</p>	<p><i>ad valorem</i></p>	Ten per cent

By the Commerce and Industry Department Notification No 3798—90, dated the 27th May 1911, all articles, other than those specified below, liable to duty under head, 5, 6, 8, 9, or 10, as the case may be, of the above schedule, were exempted from so much of the duty leviable thereunder on importation into British India as is in excess of duty of 10 per cent *ad valorem*—

Main springs and Magazine springs

Gun stocks and Breech blocks

Actions (including skeleton and waster)

Breech bolts and their heads

Cocking pieces

Locks (for Muzzle-Loading arms)

Machines for making, loading, closing or capping cartridges for rifled arms.

## Schedule III—(Import Tariff)

No	Names of Articles	Per	Rate of Duty
1	Liquors, Opium, Salt, Fish, Tobacco and Silver Liquors (a)— Ale beer, and porter Cider, and other fermented liquors Liqueurs and sweetened spirits, cordials, bitters, per- fumed spirits, and toilet preparations containing spirit which has been rendered effectually and per- manently unfit for human consumption Spirit used in drugs, medicines, or chemicals	Imperial gallon or 6 quart bottles of the strength of Londonproof	Five per cent 7 13 0 and the duty to be increased or reduced in pro- portion as the strength of the spirit exceeds or is less than London proof
	Spirit, other sorts	"	9 6 0 and the duty to be increased in or reduced in proportion as the strength of the spirit exceeds or is less than Lon- don proof
	Wines— Champagne and all other sparkling wines not con- taining more than 42 per cent of proof spirit All other sorts of wines not containing more than 42 per cent of proof spirit Provided that all sparkling and still wines contain- ing more than 42 per cent of proof spirit shall be liable to duty at the rate applicable to "Spirit, other sorts"	Imperial gallon or 6 quart bottles	3 12 0 1 8 0
2	Opium (b) and its alkaloids	seer of 80 tolas	24 0 0
3	Salt (c)—	Indian maund of 52½ lbs avoird- upois weight.	The rate at which excise duty is being levied on salt manu- factured in the place where the import takes place. (d)

Schedule III—(Import Tariff)—contd.

No	Names of Articles	Per	Rate per duty
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4	Liquors, Opium, Salt, Fish, Tobacco and SILVER— <i>concd</i> SALTED FISH, wet or dry	Indian rupee of 82½ lbs avoirdupois weight	Such rates of duty not exceeding twelve annas as the Govt. in Council may, in the Gazette of India, from time to time prescribe (e)
5	TOBACCO— Unmanufactured Cigars Cigarettes weighing less than 3 lb per thousand Cigarettes weighing 3 lb or more per thousand Manufactured, other sorts SILVER bullion or coin, except current coin of the Government of India which is free	pound thousand pound ounce	1 0 0 1 10 0 3 2 0 1 4 0 1 2 0 0 4 0
6			

(a) Spirit imported from any port in British India, and protected by the certificate of an officer empowered in that behalf, is chargeable with only the amount, if any, by which the duty leviable thereon exceeds the duty shown by such certificate to have been already paid.—(Act VIII of 1894, Section 7.)

(b) Opium imported from any port in British India, and protected by the certificate of an officer empowered in that behalf, is chargeable with only the amount, if any, by which the duty leviable thereon exceeds the duty shown by such certificate to have been already paid.—(Act VIII of 1914, Section 7.)

(c) Salt imported from any port in British India, and protected by the certificate of an officer empowered in that behalf, is chargeable with only the amount, if any, by which the duty leviable thereon exceeds the duty shown by such certificate to have been already paid.—(Act VIII of 1894, Section 7.)

(d) By Finance Department Notification No. 1748-B-FC, dated the 20th March 1907, the duty was fixed at one rupee in the case of Burma, Bengal, Madras, Bombay and Sind. In case of Aden the duty is one rupee for each 140 lb avoirdupois

(e) The rate is six annas

Schedule IV—(Import Tariff.)  
GENERAL DUTIES

No	Names of Articles	Per	Tariff Valuation	Duty
1	ANIMALS, LIVING Horses, Cattle, Sheep, and all other living animals of all kinds	Rs 2 p		
2	ARTICLES OF FOOD AND DRINK	cent	42 0 0	Five per cent
3	COFFEES FRUITS AND VEGETABLES (except fresh fruits and vegetables not separately enumerated, which are free)— Almonds without shell In the shell " c (Kagaz) Persian " " European	" " " " "	82 0 0 23 0 0 75 0 0 45 0 0	" " " " " "

[illegible]

Schedule IV—(Import Tariff)—contd.

No	Names of Articles.	Per	Tariff	Duty
7	ARTICLES OF FOOD AND DRINK—contd.		Rs a p	
	SPICES—	cwt	14 0 0	Five per cent
8	Betelnuts, raw, whole, split, or sliced, from Goa Straits		9 0 0	"
	" whole, from Ceylon		11 0 0	"
	" raw, split (sun-dried) from Ceylon		21 0 0	"
	Chilies, dry	cwt	12 0 0	"
	Cloves		42 0 0	"
	" stems and heads		10 0 0	"
	" in seeds, nirlayang		13 0 0	"
	Ginger, dry		15 0 0	"
	Malace	lb	1 8 0	"
	Nutmegs		0 5 0	"
	" in shell		0 3 0	"
	Pepper, black	cwt	32 0 0	"
9	Pepper, white		38 0 0	"
	All other sorts of spices		38 0 0	"
	SUGAR, crystallised, beet	cwt	9 12 0	"
	" and soft, refined in China		11 0 0	"
	" from Java, 23 Dutch standard and above		9 8 0	"
	" from Java, 16 to 22 Dutch standard		8 4 0	"
	" from Java, 15 Dutch standard and under		9 8 0	"
	" from Mauritius, equal to 16 Dutch standard and over		8 12 0	"
	Molasses from Java		2 8 0	"
	" other countries		2 8 0	"
	Sugar, all other sorts, including saccharine produce of all kinds and connexions		0 10 0	"
	TEA, black	lb	0 9 0	"
10	CHEMICALS, DRUGS, MEDICINES AND TANNING MATERIALS			
	CHEMICAL PRODUCTS AND PREPARATIONS—			
	Acid, sulphuric	cwt	2 6 0	"
	Alkali, Indian (saji-khar)		5 12 0	"
	Alum		16 0 0	"
	Arsenic (China mass)		31 0 0	"
	" other sorts		3 12 0	"
	Copperas, green		3 0 0	"
	Explosives namely, blasting gelatine, dynamite, roborite, and all other descriptions, including detonators and blasting fuse	cwt	31 0 0	Five per cent
	Sal ammoniac		3 0 0	"
	Soda ash		3 12 0	"
	Soda Bicarbonate		3 0 0	"



Schedule IV—(Import Tariff)—*contd.*

[illegible]

Schedule IV.—(Import Tariff)—contd.

No	Names of Articles	Per	Tariff Valuation	Duty
12	DYEING AND TANNING MATERIALS—could		Rs. a p	
	Alvar bark	cwt	3 12 0	
	Buzand (gulpista)			
	Cochineal	lb	Rs 1 0 0	
	Gallnuts (myrabolams)		ad valorem	
	"		31 0 0	
	Madder or manjit	cwt	ad valorem	
	Orehilla weed			
	Sapou wood and root			
	Turneric			
	All other sorts of dyeing and tanning materials			
13	METALS AND MANUFACTURES OF METALS			
	HARDWARE AND CUTLERY, including ironmongery and platedware, and also including machines, tools, and implements to be worked by manual or animal labour (Exemption, which are free (i) Water-lifts sugar-mills, oil-presses, and parts thereof, and any other machines and parts of machines ordinary used in processes of husbandry, or for the preparation for use or for sale of the products of husbandry, which the Governor-General in Council may, by notification in the Gazette of India, exempt, (ii) the following agricultural implements, when constructed so that they can be worked by manual or animal power, namely, winnowers, threshers, mowing and reaping machines, elevators, horse and chaff-cutters, root-cutters, horse and bullock gears, ploughs, cultivators, scalliers, harrows, clod-crushers, seed-drills, hay-tedders, and rakes, (iii) the following dairy appliances, when constructed so that they can be worked by manual or animal power, namely, cream separators, milk sterilizing or pasteurizing plant, milk aerating and colling apparatus, churns, butter dryers, and butter workers, (iv) the following articles used in the manufacture of cotton, namely bobbins, warping, forks for looms, heads, needles for dobblies, pickers (buffalo and others), picking bands, picking levers, picking sticks (over and under) reed, pliers, shuttles (for power looms), springs for looms, strapings, and web forks, (v) box backs and wells and rough shaped bobbins, when imported by or on behalf of a manufacturer or millowner, and certified by him to be intended exclusively for use in his mill]			
14	MACHINERY, namely, prime-movers and component parts thereof, including boilers and component parts thereof, also including locomotive and portable engines, steam-rollers, fire-engines, and other machines in which the prime-mover is not separable from the operative parts			
	MACHINERY (and component parts thereof), meaning machines or sets of machines to be worked by electric steam, water, fire or other power not being manual or animal labour, or which, before being brought into use, require to be fixed with reference to other moving parts, and including belting of all materials for driving machinery			

Schedule IV.—(Import Tariff)—*contd.*

No.	Name of Article	Per	Tariff Valuation	Duty.
24	MACHINERY, &c.— <i>contd.</i>			
	Provided that the term does not include tools and implements to be worked by manual or animal labour, and provided also that only such articles shall be admitted as component parts of machinery as are indispensable for the working of the machinery, and are, owing to their shape or to other special quality, not adapted for any other purpose.			
	Metallic and component parts thereof made of steel, alloys other than metal are included in this entry.			
25	Metallic, wrought and wrought, and articles made of metals—			
	Bars, rods and leaves, European		ad valorem	Five per cent.
	China			
	Pattern of yellow metal, sheets weighing, 1 lb or above per square foot, and sheathing, brazier, and plates	54 0 0	ad valorem	
	Pattern of yellow metal (old)	33 0 0	ad valorem	
	Alloys, flat or in rolls, weighing less than 1 lb per square foot			
	Wire			
	all other sorts		ad valorem	
	Copper, bolt and bar, rolled			
	brackets, shelves, plates and sheathing	62 0 0	ad valorem	
	nails and composition nails	45 0 0	ad valorem	
	old	58 0 0	ad valorem	
	plates, tiles, ingots, cakes, bricks, and slabs	2 2 0	ad valorem	
	China, white, copperware	1 14 0	ad valorem	
	roll of damppan, white, 10 to 11 in X 4 to 5 in.			
	roll of damppan, coloured, 10 to 11 in X 4 to 5 in.	2 0 0	ad valorem	
	wire, including phosphor-bronze and manganese, except current coin of the Government of India, which is free			
	German Silver			
	Gold bullion and coin			
	leaf			
	Iron, anchors and cables			
	Lowmoot and similar qualities, all descriptions			
	angle, other than Lowmoot or Swedish	110 0 0	ad valorem	
	Swedish, other than Lowmoot or Swedish, if galvanised, tinned, or lead-coated			
	Iron bar, Swedish and similar qualities	190 0 0	ad valorem	
	round-rod, and square, under 11 in diameter			
	round-rod, under 11 in diameter	200 0 0	ad valorem	



Schedule IV—(Import Tariff)—*contd.*

No.	Names of Articles	Per	Tariff Valuation	Duty
15	METALS AND MANUFACTURES OF METALS— <i>contd</i> METALS, unwrought and wrought, and articles made of metals— <i>contd</i>		Rs a. p.	
	Iron, all other sorts, including discs or circles and wire netting		ad valorem	Five per cent
	Lametta			
	Lead, all sorts (except sheets for tea chests which are free)			
	Quicksilver			
	Shot, bird			
	Steel, anchors and cables	lb	1 " 8 0	"
		cwt	22 " 0 0	"
			ad valorem	"
	Blooms	ton	110 " 0 0	"
	angle, T	ton	110 " 0 0	"
	" and hoop, if galvanised, tinned, or lead-coated	ton	110 " 0 0	"
	bars, (other than cast steel)	ton	110 " 0 0	"
	Swedish and similar qualities	ton	110 " 0 0	"
	nail-rod, round-rod, and square, under ½ inch in diameter	ton	115 " 0 0	"
	bar, galvanised, tinned, lead-coated, polished, or polished	ton	115 " 0 0	"
	channel, including channel for carriages	ton	120 " 0 0	"
	plates, above ½ inch thick, and strips	ton	120 " 0 0	"
	sheets, up to ½ inch thick	"	125 " 0 0	"
	sheets (other than corrugated), plates or strips, if galvanised tinned, lead-coated, chequered, or planished	ton	140 " 0 0	"
	hoop	ton	190 " 0 0	"
	plates, corrugated, galvanised or black	ton	190 " 0 0	"
	nails			"
	nuts and bolts, also hooks and nuts for old			"
	roofing, galvanised or black			"
	beams, joists, pillars, girders, screw-piles, bridge work, and other such descriptions of steel, imported exclusively for building purposes	cwt	2 " 8 0	"
	cast and blistered, including spring and tub steel			"
	roofing, guttering, and continuous roofing			"
	pipes and tubes, including fittings therefor, such as bends, boots, elbows, tees, sockets, flanges, and the like			"
	rails, chairs, sleepers and bearing, and fish-plates, spikes (commonly known as dog-splines), switches, and crossings, other than those described in No 60, also lever-boxes, clips, and tie-bars			"
	rivets and washers, all sorts			"
	wire, including fencing wire and wire-rope, but excluding wire-netting			"
			ad valorem	One per cent

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No.	Names of Articles	Per	Gross Valuation	Duty.
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# Schedule IV.—(Import Tariff)—contd.

## Customs Tariff

Duty.	Tariff Valuation	Per	Names of Articles	
Five per cent.	ad valorem	Five per cent.	OTHER ARTICLES MANUFACTURED AND SHAPED—contd.	Cotton yarn articles made of cotton—
Five per cent.	ad valorem	Five per cent.	COTTON YARN ARTICLES MADE OF COTTON—	Cotton yarn and yarn
Five per cent.	ad valorem	Five per cent.	COTTON, COTLIN AND PLYESTER	Cotton, cotton l, rope and twine made of any vegetable
Three and one-half per cent.	ad valorem	Free	COTTON YARN ARTICLES MADE OF COTTON—	Cotton yarn and yarn
Three and one-half per cent.	ad valorem	Free	COTTON YARN ARTICLES MADE OF COTTON—	Cotton yarn and yarn
Five per cent.	ad valorem	Free	COTTON YARN ARTICLES MADE OF COTTON—	Cotton yarn and yarn
Five per cent.	ad valorem	Free	COTTON YARN ARTICLES MADE OF COTTON—	Cotton yarn and yarn
Five per cent.	ad valorem	Free	COTTON YARN ARTICLES MADE OF COTTON—	Cotton yarn and yarn
Five per cent.	ad valorem	Free	COTTON YARN ARTICLES MADE OF COTTON—	Cotton yarn and yarn
Five per cent.	ad valorem	Free	COTTON YARN ARTICLES MADE OF COTTON—	Cotton yarn and yarn
Five per cent.	ad valorem	Free	COTTON YARN ARTICLES MADE OF COTTON—	Cotton yarn and yarn
Five per cent.	ad valorem	Free	COTTON YARN ARTICLES MADE OF COTTON—	Cotton yarn and yarn
Five per cent.	ad valorem	Free	COTTON YARN ARTICLES MADE OF COTTON—	Cotton yarn and yarn
Five per cent.	ad valorem	Free	COTTON YARN ARTICLES MADE OF COTTON—	Cotton yarn and yarn
Five per cent.	ad valorem	Free	COTTON YARN ARTICLES MADE OF COTTON—	Cotton yarn and yarn



Schedule IV.—(Import Tariff)—contd

No	Names of Articles	Per	Tariff Valuation.	Duty
39	OTHER ARTICLES, UNMANUFACTURED AND MANUFACTURED—contd		Rs 2 p	
	HIDES AND SKINS (except raw or salted hides and skins, which are free), including parchment and vellum, gold-beaters' skins, and all other descriptions of hides or skins		ad valorem	Five per cent
40	HORN		ad valorem	Five per cent
41	articles made of, not otherwise described		ad valorem	Five per cent.
	INSTRUMENTS, APPARATUS, AND APPLIANCES, and parts thereof—Computing, Dental, Distilling, Diving, Drawing, Educational, Electric, Electric Lighting, Galvanic, Measuring, Musical, Optical, Philosophical, Phonographic, Photographic (including materials for Photography), Scientific, Surgical, Surveying, Telegraphic, Telephonic, Typewriters, and all other sorts, except Telegraphic Instruments, and apparatus, and parts thereof, when imported by or under the orders of a railway company, and any instruments, apparatus, and appliances when imported by a passenger as part of his personal baggage and in actual use by him in the exercise of his profession or calling which are free. All band instruments (other than stringed instruments), imported by a Native regiment of His Majesty's regular forces in India, or by a unit of the Imperial Service Troops, or by a Military Police Battalion, and certified by the Officer Commanding the regiment or unit or the officer in charge of the Military Police Battalion to be for the bona fide exclusive use of the regimental band, or the band attached to the Military Police Battalion, as the case may be, and the following accessories thereto, are also free of duty —			
	Bags for bagpipes Cardholders Carriages (brown or black) Cases for reeds and mouth-pieces Cases (leather or wooden) Chanters, pipe, and practice Cleaners for brass and reed instruments Cord for bagpipes Crooks for bagpipes Drum heads Drum sticks Drum flesh hoops Fingertops Green broadcloth for drums Green Silk ribbon for drums Key pads for reed instruments Ligatures for reed instruments Mouthpieces and caps Mutes for brass instruments Pipes tassels for bagpipes Reeds Ropes for drums Ropes for bagpipes Ribbons for bagpipes Sanks and slides for brass instruments Silver buckles for drums Silver buttons for drums Springs Snare Taps for brass instruments Valve corks Valve tops and needles			

	Names of Articles	Per	Tariff Valuation	Duty
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OTHER ARTICLES UNMANUFACTURED AND MANUFACTURED—cont'd



Schedule IV.—(Import Tariff)—*could*

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Schedule IV—(Import Tariff)—*continued*

No.	Name of Article	Per	Unit	Value	Duty
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ARTICLE, SPECIFICATION OF NATURAL SPECIES, INCLUDING VARIETAL AND CULTIVATED—continued		UNITED STATES CUSTOMS DUTY	
60	STRAW, SEED, OR OTHER, OF NATURAL SPECIES, INCLUDING VARIETAL AND CULTIVATED	Free	Free
61	STRAW, SEED, OR OTHER, OF NATURAL SPECIES, INCLUDING VARIETAL AND CULTIVATED (for which see No 51)	Free	Free
62	STRAW, SEED, OR OTHER, OF NATURAL SPECIES, INCLUDING VARIETAL AND CULTIVATED	Free	Free
63	STRAW, SEED, OR OTHER, OF NATURAL SPECIES, INCLUDING VARIETAL AND CULTIVATED	Free	Free
64	STRAW, SEED, OR OTHER, OF NATURAL SPECIES, INCLUDING VARIETAL AND CULTIVATED	Free	Free
65	STRAW, SEED, OR OTHER, OF NATURAL SPECIES, INCLUDING VARIETAL AND CULTIVATED	Free	Free
66	STRAW, SEED, OR OTHER, OF NATURAL SPECIES, INCLUDING VARIETAL AND CULTIVATED	Free	Free
67	STRAW, SEED, OR OTHER, OF NATURAL SPECIES, INCLUDING VARIETAL AND CULTIVATED	Free	Free
68	STRAW, SEED, OR OTHER, OF NATURAL SPECIES, INCLUDING VARIETAL AND CULTIVATED	Free	Free
69	STRAW, SEED, OR OTHER, OF NATURAL SPECIES, INCLUDING VARIETAL AND CULTIVATED	Free	Free
70	STRAW, SEED, OR OTHER, OF NATURAL SPECIES, INCLUDING VARIETAL AND CULTIVATED	Free	Free
71	STRAW, SEED, OR OTHER, OF NATURAL SPECIES, INCLUDING VARIETAL AND CULTIVATED	Free	Free
72	STRAW, SEED, OR OTHER, OF NATURAL SPECIES, INCLUDING VARIETAL AND CULTIVATED	Free	Free
73	STRAW, SEED, OR OTHER, OF NATURAL SPECIES, INCLUDING VARIETAL AND CULTIVATED	Free	Free
74	STRAW, SEED, OR OTHER, OF NATURAL SPECIES, INCLUDING VARIETAL AND CULTIVATED	Free	Free
75	STRAW, SEED, OR OTHER, OF NATURAL SPECIES, INCLUDING VARIETAL AND CULTIVATED	Free	Free
76	STRAW, SEED, OR OTHER, OF NATURAL SPECIES, INCLUDING VARIETAL AND CULTIVATED	Free	Free
77	STRAW, SEED, OR OTHER, OF NATURAL SPECIES, INCLUDING VARIETAL AND CULTIVATED	Free	Free
78	STRAW, SEED, OR OTHER, OF NATURAL SPECIES, INCLUDING VARIETAL AND CULTIVATED	Free	Free
79	STRAW, SEED, OR OTHER, OF NATURAL SPECIES, INCLUDING VARIETAL AND CULTIVATED	Free	Free
80	STRAW, SEED, OR OTHER, OF NATURAL SPECIES, INCLUDING VARIETAL AND CULTIVATED	Free	Free

Schedule V—(Import Tariff)

No.	Names of Articles	Per	Rate of duty
1	Rice husked or unhusked, including rice bran and rice dust, which are free	Indian of 82 lb maund dupols weight	Rs 1 p 0 3 0

*Note*—Under Act IX of 1903 a customs duty at the rate of a quarter of a pie per pound has been levied from the 31st April 1903 on all tea produced in India and exported from any customs port to any port beyond the limits of British India or to Aden. The proceeds of this cess are paid to the Tea Cess Committee appointed under Section 1 of the Act. On the recommendation of this Committee the maximum rate of a quarter of a pie per pound may be reduced.



## NATIVE PASSENGER SHIPS.

The following table shows the number of native passenger ships which have been licensed by the Government of India for the purpose of carrying passengers, and the number of passengers carried, during the year 1900-1901.

The table is divided into two parts, the first showing the number of ships and passengers carried, and the second showing the number of ships and passengers carried, by class of ship.

The first part of the table shows the number of ships and passengers carried, by class of ship, during the year 1900-1901.

The second part of the table shows the number of ships and passengers carried, by class of ship, during the year 1900-1901.

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The second part of the table shows the number of ships and passengers carried, by class of ship, during the year 1900-1901.

Difficulties of the question—the appointment of the committee was welcomed by the natives, though some criticisms were directed against the appointment of the committee. It is well known that the standard laid down under the act is not now in force, and is not adequate to provide accommodation for all on board. It would be inadvisable to apply any one vessel to the trade, the inadequacy of the present standard, but it may roughly be said that, on the assumption that the cubic capacity which is provided in the boats should be at the rate of one cubic foot per adult the accommodation now provided will only afford room for 20 to 25 per cent of the number of passengers carried. The question is further complicated by the fact that a number of natives, and during their voyage, and that many instances on the principle that there should be no recommendation for all on board will necessarily result in the curtailment of the

## TIDAL CONSTANTS.

The approximate standard time of High Water may be found by adding to, or subtracting from, the time of High Water at London Bridge, given in the calendar, the corrections given as below —

[illegible]



## Wild Animals and Snakes.

In the 25 years ending in 1911 the number of human beings reported to have been killed in British India by wild animals was 67,389, and by snakes 337,661, making together a total of 67,389, but the figures are far from accurate up to the year 1900 deaths from man and dogs and jackals were included in the figures, but as these animals are not ordinarily dangerous to human beings or cattle, the figures have been omitted since 1901. The annual average number of persons killed by wild animals in 1911 to 502 in 1914 from 395 in 1913 to 502 in 1914. The unclassified head "other animals" rose from 395 in 1913 to 502 in 1914.

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By wild snakes	By snakes
17,214	3,090
19,605	2,752
21,267	2,581
21,054	2,025
22,175	3,456
22,206	2,461
21,571	2,210

During the year 1914, 1,745 persons were

killed by wild animals in British India. The figure is about 8 per cent higher than the casualties in 1913 but it is lower than in 1910. The largest death-roll, as in 1913, was returned by Bihar and Orissa, which was responsible for nearly one-third of the total for all India. The figures for other provinces generally exhibit increases, but in the United Provinces the number of casualties dropped to 122 from 127 in 1913, while there were still decreases in the Bombay Presidency and in the North-West Frontier Province. Coorg and Ajmer-Merwara which returned 51 and 3 deaths, respectively, in 1914

The largest number of deaths of human

[illegible]

The loss of human lives due to snake-bites amounted to 22,594. The returns under this head show a general increase in nearly all the provinces and, in 1913, Bihar and Orissa with 5,968 deaths in the United Provinces with 3,513, and Bengal with 4,356 suffered most heavily. Of these three provinces Bengal shows a slight decrease, while in the other two provinces there was an increase compared with the preceding year. Decrease not only in Jharkhand and Assam and no death is reported from Coorg, but the mortality of 1,169 in the Punjab is the highest for that province recorded in recent years. In the last named province *Echis viper* were the greatest source of danger, and special measures to exterminate them have been organized. The use made of snake-killers by Jhaekes does not yet afford any useful data on which definite conclusions can be formed as to the efficacy of this method of treatment.

in the preceding year

in the present case

During the year 1911 2500 wild animals were destroyed in 1911

[illegible]

72. Total amount paid in rewards

Animals as per 1911-12 "H. X."

1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific information required.

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THE GREAT WALL

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The first of these is the fact that the country is a net importer of foodstuffs. This is due to the fact that the country is a net importer of foodstuffs. The second is the fact that the country is a net importer of foodstuffs. The third is the fact that the country is a net importer of foodstuffs.

**The Official Policy**—The official policy is outlined in the statement of the Government for Commerce during the debate to which reference has been made. It was afterwards published in an official communication which set out the following facts: The latest forecasts for the crop which is now being harvested in India, 1927-28, are 12,148,000 acres under wheat, 1,605,000,000 bushels, valued at Rs. 1,161,100,000, compared with 12,272,000 acres and 1,692,000,000 bushels in 1926-27. The Government are of the opinion that the present crop of wheat in India is not likely to be as good as the previous year's, and that the Government will have to take steps to meet the requirements of the country. The Government are of the opinion that the present crop of wheat in India is not likely to be as good as the previous year's, and that the Government will have to take steps to meet the requirements of the country.

The very first guarantee the Government of India would take any profit, the decision of the Government was that

**A Successful Policy—No official pronouncement concerning the working of the scheme has been made. On one point, however, the Government was clear. The price of wheat in India had fallen down the last few years, and the Government had to face a serious situation. The price of wheat in India had fallen down the last few years, and the Government had to face a serious situation. The price of wheat in India had fallen down the last few years, and the Government had to face a serious situation.**

which accomplished these ends the scheme occurred a good profit to the cultivator, which is estimated at twenty five annas per acre. The Government price was worked out at less than three annas per acre. The Government price was worked out at less than three annas per acre. The Government price was worked out at less than three annas per acre.

With the single exception of the disturbance to exchange the working of the scheme was smooth and uneventful. It is believed on the transaction—ambitious people saw a profit of a million or two in it—were not realised. The highest price paid by Government was five rupees twelve annas and E O B, the lowest four rupees. The Government was not to have recourse to outside funds since it is estimated that the balance of the Government of India and the Government of India will be sufficient to provide for the outlay on the purchase of wheat.

The Secretary of State has therefore decided that the Government of India shall place funds from their own resources at the disposal of the Government of India for the purchase of wheat. The Government of India will be responsible for a break in exchange rate and a large demand for sterling bills in London, or the Government will be responsible for a break in exchange rate and a large demand for sterling bills in London.

On this point, the Government has been very clear. The price of wheat in India had fallen down the last few years, and the Government had to face a serious situation. The price of wheat in India had fallen down the last few years, and the Government had to face a serious situation.

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Summary Table showing the Value of Imports and of Exports of London Merchandise of Exports of Indian Merchandise and of Total Exports for each month in the two previous years and for the completed months of the current year.

	IMPORTS			EXPORTS		
	1913-14	1914-15	1915-16	1913-14	1914-15	1915-16
April	Rs. 15,04,15,524	Rs. 14,40,03,703	Rs. 9,27,00,000	1,21,10,000	1,20,00,000	1,20,00,000
May	14,30,51,001	14,58,96,000	9,12,12,771	1,20,00,000	1,20,00,000	1,20,00,000
June	12,22,40,850	12,08,10,583	10,30,52,010	1,20,00,000	1,20,00,000	1,20,00,000
July	14,17,01,327	14,00,30,230	11,11,10,001	1,20,00,000	1,20,00,000	1,20,00,000
August	10,13,04,250	12,02,02,707	12,10,07,411	1,20,00,000	1,20,00,000	1,20,00,000
September	10,05,18,547	7,30,80,111	12,51,00,505	1,20,00,000	1,20,00,000	1,20,00,000
October	10,55,65,522	12,30,20,540	11,51,00,275	1,20,00,000	1,20,00,000	1,20,00,000
INDIAN MERCHANDISE						
April	21,03,17,624	20,41,12,506	12,27,04,005	21,40,31,570	20,50,35,357	12,40,77,121
May	10,20,48,020	21,04,41,730	15,39,75,907(a)	19,67,70,010	21,39,41,731	15,71,45,911(b)
June	17,53,03,308	21,42,85,353	17,73,40,128(b)	17,80,20,533	21,80,27,777	18,15,35,230(b)
July	20,23,74,035	10,12,60,104	14,04,13,002(c)	20,03,40,013	10,50,50,908	15,09,04,038(c)
August	17,24,00,032	9,55,14,237	14,80,10,722(d)	17,59,47,588	9,78,19,602	15,23,06,112(d)
September	10,47,77,077	7,50,53,000	10,90,67,015(c)	19,80,02,379	7,90,81,915	17,32,77,691(c)
October	21,08,38,522	9,90,67,473	17,87,00,057	22,03,20,234	10,36,02,580	18,28,20,058

(a) Includes Rs. 1,20,50,910, being the value of wheat exported on Government account  
 (b) Includes Rs. 3,24,15,620, being the value of wheat exported on Government account  
 (c) Includes Rs. 1,87,62,680, being the value of wheat exported on Government account  
 (d) Includes Rs. 44,40,330, being the value of wheat exported on Government account  
 (e) Includes Rs. 2,04,092, being the value of wheat exported on Government account

Table B shows the Value of Imports and Exports of Foreign Merchandise of Exports of Indian Merchandise and of Total Exports for each month in the two previous years and for the compared months of the current year —

	Metric Tons				In Tons			
	Imports	Exports (Foreign)	Exports (Indian)	Exports (Total)	Imports	Exports	Imports	
(I) October 1913.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
" 1914	11,51,91,251	11,11,001	17,57,00,057	18,28,20,008	63,82,800	10,34,750		
" 1915	12,30,20,510	10,35,107	9,00,07,473	10,30,02,580	47,24,272	2,00,408		
(II) Seven months 1st April to 31st October 1913	10,55,05,622	14,00,712	21,08,38,522	22,03,20,231	3,08,45,040	51,50,020		
" 1914	76,06,0715	2,01,87,102	1,00,08,30,510	112,30,17,081(a)	8,15,01,800	81,85,014		
Seven months 1st April to 31st October 1914	874,79,846	2,08,40,077	1,09,12,40,111	1,11,70,80,300	14,33,13,285	2,76,53,503		
Seven months, 1st April to 31st October 1915	105,50,022	2,76,03,282	1,30,52,50,187	1,30,08,62,400	19,32,14,736	5,35,03,746		
Increase (+) or Decrease (—) in October 1915, compared with—								
(i) October 1914	84,27,201	+4,76,704	+7,87,41,584	+7,02,18,378	+10,58,507	+7,44,201		
(ii) Increase (+) or Decrease (—) in Seven months, 1st April to 31st October 1915, compared with—								
(1) Seven months, 1st April to 31st October 1914	—1,01,52,267	+6,21,180	—1,81,20,405	—1,75,08,276	—2,44,02,741	—41,21,270		
(II) Seven months, 1st April to 31st October 1915	—10,48,52,601	+5,38,085	+55,90,206	+50,28,201	—6,18,11,416	—1,94,07,880		
(1) Seven months, 1st April to 31st October 1915	—20,41,05,807	+5,83,880	—26,84,28,608	—26,78,44,788	—11,17,12,807	—4,54,08,132		

(a) Includes Rs. 4,88,50,647 being the value of wheat exported on Government account









The Sir John Ambulance Association in India, which since the outbreak of the war has firmly established itself at the Red Cross Society of India, is controlled by an Indian Council under the Presidency of H. E. the Viceroy. The executive work is carried out by a small Executive Committee composed as follows:—The Director-General, Indian Medical Service, the President of the Railway Board, the Director of Medical Services in India the Private Secretary to the Viceroy the Surgeon to the Viceroy, a Representative of the Education Department, a Representative of the Foreign Department, the General Secretary, the Treasurer.

Lieutenant-Colonel R. J. Blackham, C.I.F. V.H.S. has carried on the work of Hon. General Secretary in addition to his military duties for seven years. In November 1914 he was seconded by the War Office for duty as the Secretary of the Association in India. The Association has commodious offices at Simla and Delhi and accompanies the Government of India in its moves from the Summer to the Winter capitals. It has a large Depot for distributing Ambulance Stores at Bombay, and since the outbreak of the War the Indian Council has established a War Gifts Depot also at Bombay for the receipt and despatch of Red Cross gifts. This Depot dealt with comforts and gifts to the value of upward of eight lakhs (£50,000) during the first ten months of the war.

ments and all other details can be obtained on application to the Military Secretary, India Office, London or to the Chief of the General Staff Simla. The complete scheme of training cadets in India comprises, in addition to the college at Quetta, a college at Dehra Dun and one for candidates for the cavalry at Sangor. In London on February 22, 1916, and following days at which there will be open to competition—100 cadships at the Training College at Quetta, India (for the Indian Army), less such number as may be awarded to King's Cadets, King's India Cadets, or Honorary King's India Cadets. Forms of application will be furnished on application by letter addressed to the Secretary, Civil Service Commission, Burlington Gardens, London, W. The forms should be completed and forwarded to the Secretary, Civil Service Commission.

The first batch of 99 joined at Quetta in May, and in November the commandant reported that 95 gentlemen cadets were able to receive commissions. The course of six months instruction at these colleges embraces drill, musketry, minor tactics, military history and strategy, physical training, riding, military engineering, military sketching and reconnaissance, map-reading, and almost daily instruction in rifle law, and almost daily instruction in

## WIRELESS TELEGRAPHY.

graphy in has official capacity at the expense of Government no licence is required, only executive permission, which may be given so far as the Telegraph Department is concerned by the Director-General, Posts and Telegraphs.

(2) When an officer carries on experiments as a private individual at his own expense he must obtain a licence. If the approval of the military authorities is required to what he proposes to do he should obtain such approval before the Director-General, Posts and Telegraphs, is approached. The licence will then be submitted by the Director-General, Posts and Telegraphs, for the sanction of the Government of India.

(3) With reference to the above, attention is drawn to the necessity for applying for licences to own and use wireless telegraphy apparatus of installations, experimental or otherwise. Applications for such licences will be submitted through the Chief of the General Staff and will contain particulars regarding the apparatus showing (a) the system it is proposed to employ, (b) the maximum range of signalling to be effected, (c) the nature of the apparatus, (d) the source of power (current and voltage).

The annual report of the Indian Telegraph Department for 1914-15 states—The total number of wireless stations rose from 17 to 18 of which 10 were coast stations open for general public communication with ships at 15 of all kinds is compared with 70,526 in 1913. The number exchanged with ships is 1,412 as against 5,002 in the preceding year. New stations were opened at Secundrabad, Madras and Lamoon and the stations at Madras and Lamoon and the stations at Port Blair, Diamond Islands and Victoria Point. The number of land stations of one The wireless stations increased satisfactorily throughout the year but difficulty is still experienced in communication between islands of atmospheric nature. The only serious breakdown occurred in April 1914 when a cable was broken at the point at Calcutta.

licences to Officers—The Government of India has decided that the granting of licences to officers in respect of wireless telegraphy will be subject to the following conditions:—(1) When an officer is required to use wireless telegraphy for official purposes, he must obtain a licence from the Government of India. (2) The licence will be granted only if the officer is satisfied that the use of wireless telegraphy is necessary for the purpose intended. (3) The licence will be granted only if the officer is satisfied that the use of wireless telegraphy is necessary for the purpose intended.



Bombay.

Mr Savers  
Mr Emett's Blackwater (fast 7 lbs, 1  
Mr Pike's Boilers (10-1 11 lbs), Owner  
Mr Hunter - Prince Charlie (11-1 9 lbs)

The D. & C. Club Cup Distance 1½ miles —  
Mr M. Goudas - Fair-Cash II (7-1 7 lbs),  
Hoyt

Mr P. R. S. - Bachelor - Wedding (9-1  
12 lb) Hardy  
Mr M. Goudas - Matchlock (4-1 19 lb),  
Hill

London of Waverley - Mr - Drake (7-1  
1 lb) Randa  
The Post (up) Distance 1½ miles —

Mr R. S. - Mybur (8-1 12 lbs) Hardy  
General Nawabzade Obaidulla Khan  
Partners (8-1 9 lbs) 14th

Mr M. Goudas and P. Mathuradas  
Mr A. M. Bhand - Bhand (9-1 4 lb)  
Mr F. Crawford

Pomroy Derby  
Mr P. R. S. - Kaid (8-1 10 lb) - Purtoo  
Stable

Mr A. S. - Horn - Mybur (8-1 12 lbs) Abbas  
Mr R. K. - Horn - Mybur (8-1 12 lbs) Abbas  
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Mr R. K. - Horn - Mybur (8-1 12 lbs) Abbas

The G. & C. Cup Distance about 1 mile, 1 fur-  
long —  
Mr A. A. Mahomed - Devent (8-1 13 lbs),  
Mr Crawford  
Mr R. K. - Horn - Mybur (8-1 12 lbs) Abbas

General Nawabzade Obaidulla Khan's  
Singer (8-1 13 lbs), Tremoweth  
Messrs M. Goudas and P. Mathuradas,  
Nabib (8-1 12 lbs), Hoyt

Malabar Hill Plate —  
Mr M. Goudas - Arthur B. (9-1 8 lbs),  
Hoyt

Mr M. Goudas - Pohn (9-1 3 lbs), Ref-  
gunson  
Mr R. S. - Bachelor's Wedding (9-1  
3 lbs) Rakhushroo

The Gough Memorial Plate Distance 6 fur-  
longs —  
Mr A. S. Gomer - Kahrarman (7-1 11 lbs),  
Marston

Messrs M. Goudas and P. Mathuradas,  
Maloz (9-1 9 lbs), Hoyt  
General Nawabzade Obaidulla Khan's  
Bero (6-1 5 lbs) Purtoo Singh

Mr R. S. - Abdul Majid (9-1 13 lbs),  
Kakhushroo  
The Mansfield Plate Distance 6 furlongs —

Mr M. Goudas - Pohn (9-1 9 lbs), Hoyt  
General Nawabzade Obaidulla Khan's  
Lady Muriel (7-1 5 lbs) Purtoo Singh

Mr M. Goudas - Pohn (9-1 9 lbs), Hoyt  
Mr M. Goudas - Pohn (9-1 9 lbs), Hoyt  
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Mr M. Goudas - Pohn (9-1 9 lbs), Hoyt







Bangalore. , ,  
Mr Sydney Smith's Hall

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**Banğalore**

**Ambala.**

Royal Calcutta Turf Club Handicap Distance —  
7 furlongs —  
Sirdar Jivran Singh's Alucos (8st 11bs.), Trianon  
Col Macleod's Dunsing Mistress (7st 9lbs.) J Southall

H II the Rajah Sir Ranjith Singh of Ptil-  
ala & Lohiana (10st 10lb.). Quin

Incharan Cup Distance 1 mile —  
H II the Right Honble Sirdar Jivran Singh's Mili  
(9st 13lbs.), W Southall  
Sardar Jivran Singh's Morning (7st 11lbs.),  
Milsom

Col Macleod's, Dunsing's Mistress (8st 7lbs.), Trianon

Patiala Cup Distance 1,000 yds —  
Mr H Schinner's Brandy II (6st 1lb.)  
L Schinner  
Sardar Dayal Singh and Jaganat Singh's  
Old Joe (7st 11bs.), W Southall  
Col Macleod's Mount (7st 9lbs.), Trianon

Ranbhir Cup Distance 1 mile —  
Sardar Jivran Singh's Menas (1st), Trianon  
(Captain Cairnes and Weiden's Lark Lodge  
(6 & 7 lbs carried 7st 2lbs.), Abdon  
Washed

Ma qe Heed's Pat's Pat (8st) Crowden  
Patalia Cup Distance 1,00 yards —  
Raja Sahib of Patiala's Little Wonder  
(9st 9lbs.) J Southall  
Captain Mostyn Owen's Miss Zena (8st 9lbs.), Crowden  
Sirdar Jivran Singh's Miss Lily (8st 2lbs.),  
Trianon

Tinnia I.M.I Cup Distance 1,000 yds —  
Sardar Dayal Singh Chachet's Old Joe  
(8st 9lbs.) Trianon  
(Captain Kennedy's Najiwi (9st 7lbs.),  
Crowden  
Kour Saranam Singh's Imperial (7st 12lbs.),  
J Southall

**Bangalore.**

The Maharajah of Mysore's Cup Distance  
1 mile —  
Mr T B Captain's Sugar Loaf (8st 1lb.),  
Milsom  
Mr M Goculdas' Double Chin (9st 4lbs.),  
A Hoyt  
The Zemindar of Nergunji's Mrs Drake  
(9st 11bs.) V Ferguson

Punjab Cup —  
 Captain Beatty's Harrogo (lost silbs carried  
 9st 12lbs) Owner  
 Captain Fuller's Blue Boy (9st 10lbs)  
 carried 9st 7lbs.) Owner  
 The 7th Lancers' Rumour (10st silbs),  
 Abdul  
 Merchant's Cup Distance 6 furlongs —  
 Major Grant's and Mr (John Young's  
 B V Bonnie Bush (7st 7lbs) Kamin  
 Major P Gould's Smurr (9st silbs carried  
 9st 12lbs), Traham  
 Captain Molyne Owen's Miss Zenia (6st  
 1lbs carried 7st 2lbs), Melsom

**Kanbōon.**

1	Yang Po Toko's Chinese name Vincent
2	Yang Kan Yih's Chinese name
3	Yang Thin's Chinese name

Mr Burgesse & Freeman McClelland  
James O'Toole & Thomas Selin  
Wmmba H.C. Blue De Lu

1875 Adamson St Lk -

Mr. Adamson & Son  
Mr. Donaldson & Corporation  
Fairbanks & Son Mining  
No. 2111 & Auburn

## Secunderabad.

Ground Walnut Hurdle Handicap Distance—  
2 miles—  
First Venture (1st 121b-), Hardy  
Maid Girl (1st), Mr Scott  
Violet (10st), Capt Durham  
Alman's Purse Distance—A

**KIRKCO.**  
Grace (3rd), Mr Brandtroot  
Moundville (3rd 7th), Capt  
Durham  
Bridle's (3rd), Mr Howell and  
Kirkco.

Kirker.

Royal Archery Club Distance 1 mile —  
Mr. Litchell's Own Cup (1st 7th), Owner  
Mr. Litchell  
Capt. H. B. Webb  
The Captain's Medal  
Mr. Turner's Own Cup (1st 10th)  
Raffles —  
Horse and Bicycle Hunt Club Distance 1 1/2

Mr. W. also see the (1st 21b), Mr. D. also see the (1st 21b)

[illegible]

2	Mr A. R Dabbel's Victory (8st 10bs),
3	Mr Sheik Ismail's Minima, (7st 12lbs),
4	Mr Jacob Zuhier's Pharaoh (8st 3lbs,
5	Mr Scavrid's Lord Satu (9st 6lbs), Mr
6	Harrison
7	Mr A. B Zuhier's Kassum (7st 8bs),
8	Mr P Malsee's Arabian Consul (8st),
9	Mr A. Hazamy's Present (9st 4lbs),
10	Mr V Hazamy's Jingle (9st 4lbs), Lb-

**Karachi**

The Western India Turf Club Stacks Distance 1 mile —

Mr Ward  
Mr Muller's Husbaby (9st 7lbs), Churchill-  
1  
Mr Cresswell's Jessie (11st 7lbs), Gurnea 2  
Mr Maligned Ghose's Moselle (7st carried 3  
9st 1lb), Mr Chapman  
Stewards Handicap Distance 7 furlongs — ●

Mr Muller's Will (2st 1 lbs), Thacker 1  
Capt Cudmore and Sandford's First Choice  
(8st), Manoo Hamy 2  
Capt Meynell's Millers' Daughter (5st, 7lbs), Trahan 3

**Quetta.**

Mr C Steers Lady Godiva (10st 2lbs),  
Owner  
Mr C Steers, Tot (11st 2lbs), Captain  
Walsborough  
Mr J Steers, Domino (11st 5lbs), Owner

**Barrackpore.**

Bombay Club Distance & Furlongs —  
Mr Bhausaheb's Lady Doris (8st 12lbs),  
Williamson  
Mr Galts' Mr's Molibby (9st 11lb-), Owner.

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Governor's Cup —  
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1. The first group of people who are not in the country are the people who are not in the country.

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SINTEL NAWI

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W. C. P. H. M. J. R. L. A. S. I.

Mr. [redacted] of [redacted]  
[redacted] [redacted] [redacted]  
[redacted] [redacted] [redacted]

Western Local (County) Towns and —  
 Mrs. Grace, and Mr. Vickers, boat Mr. &  
 William, Opn Harb. Towns and —  
 Mr. & Mrs. Vickers, boat Mr. &

If a letter  
 To Mr. Smith—Mr. Fowler has Mrs.  
 Walker  
 Mixed Double—James, Maharaaj Singh and  
 Rabi Amrit Kaur, Beat Sir and Mrs. John on  
 the annual Mahabadi Jambhri Jambhri

**ព្រឹត្តិបត្រ**

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Men + Shallow - 1 - 1000  
Men + Double - 1 - 1000

Mixed Doubles—Mr C  
Harrington beat Mr Dean  
Wicket 6-1, 9-7

Mr. J. Douglas — Atkins  
Mr. J. Douglas — Atkins

Ladies' Singles—Miss  
Huntress G-1, G-4

Mr. & Doubles—Athens  
Jones beat Dean and

The annual Abolition Law, (Anti-Slavery Journal, &c.) which should have been published in 1841, was abandoned.

## Bombay.

Western India Tournament—

Singles—Ranga Rao beat N. F. Naoraji

Men's Doubles—England and Kemble beat

J. A. D. Naoraji and Engineer

Mixed Doubles—England and Mrs. England

beat Jackson and Mrs. Nelson

Lauriat Cup—

R. D. England beat T. A. Kemble

Condon Tournament—

V. V. Bhadkamber and R. A. Wigle beat

Karte and B. Modi.

## Coonor.

Ladies' Cup—

Mrs. J. C. Bain

Gentlemen's Cup—

Staff Sergeant I. Persell

## CRICKET

Bombay, Crick 1 Week—

1 England (Lord Willmorton's side) defeat-

ed India by an innings and 203 runs

(Major J. G. (tries - scored 216 and

captain R. O. (golden 101)

2 Hindus draw with Persis (lost Innin-

nings—2nd innings—216 for loss

of five wickets. (Mr. P. Vithal scored

101, Mr. S. M. (brother 91 not out,

quadangular tournament (Poona) —

10 students Europeans beat Hindus in the

trial in which by 10 wickets—

2 goals

1 goal

2 goals

1 goal

2 goals

1 goal

2 goals

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1 goal

## HOCKEY

Xaini Tai Gym Tournament—

The Secretariat

St Joseph's College, A. A.

Bangalore Gymkhana Tournament—

2nd Hussars

St Joseph's College

South Police Tournament—

Hindol Police Team

Lucknow Police Team

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Lucknow

Mr. A. N. Gault, 2nd  
Mr. B. Shubert, and Mr. S. P.  
Mr. J. A. Vail, and  
Mr. C. L. H. 1 to 10  
Mr. C. L. H. 1 to 10

CHESS

Mr. A. N. Gault, 2nd  
Mr. B. Shubert, and Mr. S. P.  
Mr. J. A. Vail, and  
Mr. C. L. H. 1 to 10  
Mr. C. L. H. 1 to 10

POLO

Mr. A. N. Gault, 2nd  
Mr. B. Shubert, and Mr. S. P.  
Mr. J. A. Vail, and  
Mr. C. L. H. 1 to 10  
Mr. C. L. H. 1 to 10

GOLF

FOOTBALL



The Council then adjourned until the 10th day of April, 1901. The Council then adjourned until the 10th day of April, 1901. The Council then adjourned until the 10th day of April, 1901.

[illegible][illegible]

the great of war and in his gift, and the cons-

[illegible]

tion would contribute to it. At the same time, the Hong Kong and PRC should move to that in view of the erosion of imports from hostile countries; the local government is committed to the stability of promoting industries. After a long debate, in which the

Mr Clark argued the position of Governor in connection with the election of Governor, that in a common-law position of Governor, in connection with the election of Governor, the position of Governor was connected with the election of Governor.

and was offered

...the public meeting in the Town Hall on the 10th inst. was attended by the following:-

The first official dispatches regarding the Revolution in the Persian Gulf were issued at Delhi.

MARCH.

from British measures for dealing with con-  
tributors—Sir James Begg called for England  
on retiring from his position as Secretary and  
Treasurer of the Bank of Bombay

From Bay Legislative Council Budget Meeting  
at the Secretariat, Bombay, H. B. the Governor  
presiding The Hon Sir Richard Lamb presen-  
ted the Financial Statement, which showed that  
the war had affected provincial finances less  
than Imperial finances. The Financial State-  
ment having been formally presented, the Com-  
mittee Mr G. K. Gokhale

Budget meetings of the Punjab, United Provinces, Central Provinces and Burma, Legislative Councils

The non official members of the Bombay Legislative Council elected by 22 votes to 7 for the Hon Mr Chunnial Setlival as their representative on the Imperial Legislative Council in place of the late Mr G K. Gokhale

13th—Bombay Legislative Council. Debate the Hon. Mr. Pethai will read the Bill to consolidate and amend the law relating to the formal recognition of heirs executor and administrators and the appointment of the administrators of property by the Courts in

the Bombay Presidency stating that the Bill as it emerged from select Committee was very similar to the Succession Certificate Act of 1887 and was withdrawn on the opinion of the High Court and other officials. A Bill to authorize the levy of dues on vessels for the provision of lights on the coast or the province of Sind, was read a third time

At a meeting of the Senate of the Calcutta University, the following resolution which had been adopted by the Syndicate was presented for approval— "That the University of Calcutta views with the strongest disapproval and condemnation all acts and practices during the present war having the effect of intensifying the cruelties and sufferings inseparable from a state of war and which are in violation of moral and international obligations and leading to the destruction of millions of human beings and works of art and other things of cultural interest and civilization." Consideration was postponed.

16th—H. F. the Governor formally opened the Bombay Cities and Town Planning Exhibition at the Bombay Town Hall.

moved a resolution recommending consid-  
 ration of the distribution of the con-  
 dition of employment of the Official Assign-  
 Official Receiver and Official Liquidator  
 The motion was carried

2nd—Imperial Legislative Council The Hon Sir William J. Byer introduced the Budget estimates for the ensuing year. He gave an exhaustive review of the effects of the war in India and announced that there would be no increase in taxation.

The Bombay Municipal Corporation gave a dinner in the Municipal Council Hall in celebration of their jubilee. H. E. the Governor and Lady Willingdon were the principal guests.

4th—H. F. the Viceroy opened the Sarai Baidj, inaugurating direct railway passenger communication across the Lower Ganges. The bridge was named the H Bridge. The Viceroy proceeded later to Calcutta and in the afternoon travelled, returns of Lord Ripon and Lord Minto upon the Midlan

[illegible]

Mr. Chairman, with respect to the resolution to raise the minimum wage, I am not in a position to take any action on it. I am not in a position to take any action on it. I am not in a position to take any action on it.

with — F the Director inspected the newly formed "Gleaners Society," which was organized by the Government of India to include a part of its labour to the University.

The Hon. Mr. William McKeown opened the first of the discussion on the financial state-  
ment of the Hon. Mr. Dabbagh moved that  
the Motion for withdrawal be reduced by fifty  
thousand and that the amount so fixed be allo-  
ted to the Provincial Government for the de-  
velopment of education and sanitation. After a  
brief discussion a vote was taken and the

The Hon. Mr. Justice Macdonald, who presided at the trial, said that the evidence was not sufficient to establish the charge against the defendant. He also said that the defendant was not guilty of the charge.

1. The first of these is the fact that the  
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[illegible]

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MAY

19th—Mr Asquith in the House of Commons announced steps to reorganise the Cabinet on a broader personal and political basis

22nd—The Bombay Chamber of Commerce addressed the Government of Bombay on the subject of volunteering and military training in India and suggested that Government should at the earliest possible moment hold a full inquiry into the present condition of the auxiliary military forces in India, with a view to taking such steps as might be necessary to increase their numbers and to advance their efficiency

The Italian Senate passed by 262 votes to 2 a Bill granting the Government extraordinary powers in view of the political situation

23rd—The Italian Government announced the mobilization of the Italian army and declared the state of war to exist in their northern provinces

24th—The Bombay Hindu met in a joint meeting to celebrate Empire Day and speeches of profound loyalty and of enthusiastic support to Government during the continuance of the war were made

25th—The personnel of the new Cabinet is announced in London as shown to include the appointment of Mr Austen Chamberlain to be Secretary of State for India with Lord Curzon as Under Secretary

29th—Two Indian Officers of the 23rd Sikh Pioneers namely Subedar Major Bahadur Singh Bahadur and Subedar Pritham Singh, stationed with their regiment at Aden were murdered by a copy

31st—The Government of India announced an important advance up the Tigris river by the British Expeditionary Force, in close co-operation with the navy The force captured three 16-pounder guns, complete with ammunition and 241 prisoners the enemy being driven in full retreat up the river

The death was announced of Sir Charles Crossland a former member of the Indian Civil Service He first came to India in the early forties of the last century and was Chief Commissioner of British Burma during the important development in the history of that country

1st—The Government of India issued a resolution defining their policy in relation to local self government taking the general view that further development was desirable under such conditions as the local Governments and administrations might consider advisable in their respective areas, progress to be on the basis laid down by the Royal Decentralization Commission Measures to expand the electoral element and otherwise enlarge the scope and resources of the local bodies which had already been prepared by the local government were explained

The House of Lords reduced its price from four pence to one penny and announced that as a result of the notice a fortnight previously that the change was about to be made the contribution of the paper had already increased by four hundred per cent No alteration was made in the size or policy or style or content of the paper

26th—The Municipal Commission of Bombay presented a report to the Corporation in which the point was made that about twenty per cent of Bombay's food supply in point of nutritive value is lost in the process of preparation and distribution and that the Corporation should be commended for the steps taken to prevent a waste of this food in the home and in the street and that the Corporation should be commended for the steps taken to prevent a waste of this food in the home and in the street and that the Corporation should be commended for the steps taken to prevent a waste of this food in the home and in the street

27th—The people of Bengal having lifted up a hospital that was being torn up in connection with the operations in Mesopotamia the Government of India issued a circular to the effect that the Government of India would be glad to receive any information that might be obtained from the people of Bengal as to the progress of the operations in Mesopotamia

JUNE

1st—The Government of India issued a circular to the effect that the Government of India would be glad to receive any information that might be obtained from the people of Bengal as to the progress of the operations in Mesopotamia

2nd—The Government of India issued a circular to the effect that the Government of India would be glad to receive any information that might be obtained from the people of Bengal as to the progress of the operations in Mesopotamia



AUGUST

The 24th announced of Sir Theodore Hope, formerly of the Bombay Civil Service, with—it was announced that His Majesty the King Emperor had approved of the appointment of Mr George Rivers-Lowndes, barrister-at-law, to the post of Member of His Excellency the Viceroy's Executive Council in succession to the Hon. Sir Cyril M. D. M. M. C. S. I.

that general board had accepted the surrender of the entire force in south West Africa and that hostilities had ceased. The command had been unconditionally surrendered. The nineteenth section of the bond was

If the Government had made a resolution expressing its loyalty to the Emperor and wishing the alliance to the British connection with India and declaring its intention of going to stand by the Emperor it all might have been different.

1711—Romney Elective Council received  
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 1711—Romney Elective Council received

I am sorry to hear that you are ill. I hope you will get well soon.

Mr. Woodley is undoubtedly a most devoted and efficient member of the Board. He is a man of high character and high ability, and his services to the Board have been of the highest value. He is a man of high character and high ability, and his services to the Board have been of the highest value.

of the Bill was read the first time.

It was Mr. W. D. Spauld introduced a Bill for the purpose of re-instituting a Bill relative to amend the Bombay Medical Act of 1855, and this I read the first time and referred to a select Committee.—The Bill to provide for a survey of the Town and Island of Malabar was read the second and third times.

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1st Lt. Hon. Captain W. B. Graham, of the Indian Army Reserve of Officers, although an open hateway into an empty coal bunker on board the hospital ship Madras, in Bombay docks, and died from his injuries. Captain Graham had been serving on the Lamartine Station Staff in Bombay since the war broke out, and was engaged in his duties when the accident occurred. He was head of the firm of Messrs.

W. A. Graham & Co., in Bombay  
Bombay Legislative Council. The Hon. Dewan  
Khadir K. G. Godbole moved a resolution  
authorising special financial assistance from the  
Government of India for the construction by  
private enterprise of railways in the Kōkan.

Barabhai President, but after considerable discussion the resolution was withdrawn—The Hon. Mr. V. J. Patel moved a resolution in favour of the extension of the appointment of members to taluka and district local boards. The Hon. Sir P. D. Patil said:

announced on behalf of Government that H. E. The Governor's Council had already for some time been considering this question and were prepared to accept the resolution with slight amendments. The amended resolution was confirmed. Considerable further discussion

meeting concluded with expressions of appreciation of the Hon. Sir Richard Lamb, about whom I have to report.

21st.—The death occurred of the Hon. Mr. Tazulbhai Chhoy, C. I. E., of Bombay.

A force from the Aden Garrison attacked the position taken up by the Turks in their recent raid a few miles outside the settlement, and drove them from it, the pursuit being continued for a distance of five miles.

the Turks at Nasibiyeh, on the Euphrates river, an important place in the Basra vilayet, were successfully stormed and taken, and all the Turkish artillery and several hundred prisoners of war captured. The Turkish losses in killed, of whom 500 were left on the field, and wounded

27th—H E the Governor of Bombay announced that Sir Sarsoon David, Bart and Sir Samuel Brodrie had generously offered to furnish, on behalf of the City of Bombay two full equipped military airplanes, to form part of the Government of Bombay's flying force.

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I have the honor to acknowledge the receipt of your letter of the 10th inst. in relation to the above matter. I have the honor to inform you that the same has been forwarded to the proper authorities for their consideration. I am, Sir, very respectfully,  
 Yours, very truly,  
 J. H. Smith

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12th—The Laphin went ashore in the night at Sokotra during a voyage from Saigon to Marseilles, and five hundred and eighty five passengers were rescued by the steamer City of Saigon and taken to Colombo.

11th—The special Tribunal in the Lahore Conspiracy Case pronounced judgment showing that in 1913 Indian Government officials were started into a policy of hostility towards the British Government in connection with the conspiracy for an insurrection in India. The conspiracy and preparation thereby developed at the end of 1913 and beginning of August 1914.

10th—The number of men sent out from America to India in the ships this year being informed at various places in the East. In August reports of the success of the insurrection of troops, officers and students in the Punjab and collection of arms and bombs were accomplished as well as attacks on railways, bridges, ports, roads and communication.

9th—The special Tribunal in the Lahore Conspiracy Case pronounced judgment showing that in 1913 Indian Government officials were started into a policy of hostility towards the British Government in connection with the conspiracy for an insurrection in India. The conspiracy and preparation thereby developed at the end of 1913 and beginning of August 1914.

8th—The special Tribunal in the Lahore Conspiracy Case pronounced judgment showing that in 1913 Indian Government officials were started into a policy of hostility towards the British Government in connection with the conspiracy for an insurrection in India. The conspiracy and preparation thereby developed at the end of 1913 and beginning of August 1914.

7th—The special Tribunal in the Lahore Conspiracy Case pronounced judgment showing that in 1913 Indian Government officials were started into a policy of hostility towards the British Government in connection with the conspiracy for an insurrection in India. The conspiracy and preparation thereby developed at the end of 1913 and beginning of August 1914.

6th—The special Tribunal in the Lahore Conspiracy Case pronounced judgment showing that in 1913 Indian Government officials were started into a policy of hostility towards the British Government in connection with the conspiracy for an insurrection in India. The conspiracy and preparation thereby developed at the end of 1913 and beginning of August 1914.

5th—The special Tribunal in the Lahore Conspiracy Case pronounced judgment showing that in 1913 Indian Government officials were started into a policy of hostility towards the British Government in connection with the conspiracy for an insurrection in India. The conspiracy and preparation thereby developed at the end of 1913 and beginning of August 1914.

4th—The special Tribunal in the Lahore Conspiracy Case pronounced judgment showing that in 1913 Indian Government officials were started into a policy of hostility towards the British Government in connection with the conspiracy for an insurrection in India. The conspiracy and preparation thereby developed at the end of 1913 and beginning of August 1914.

3rd—The special Tribunal in the Lahore Conspiracy Case pronounced judgment showing that in 1913 Indian Government officials were started into a policy of hostility towards the British Government in connection with the conspiracy for an insurrection in India. The conspiracy and preparation thereby developed at the end of 1913 and beginning of August 1914.

2nd—The special Tribunal in the Lahore Conspiracy Case pronounced judgment showing that in 1913 Indian Government officials were started into a policy of hostility towards the British Government in connection with the conspiracy for an insurrection in India. The conspiracy and preparation thereby developed at the end of 1913 and beginning of August 1914.

12th—The Punjab Legislative Council met and passed a resolution recommending a representative for the Secretary of State urging that India should in future be officially represented at the Imperial Conference, a number of speeches were made and an important announcement was made by the Viceroy, accepting the resolution which was carried unanimously.

11th—Mr Haji Usman Abdul Wahab was elected Additional Member of the Bombay Legislative Council in place of the Hon. Mr. F. M. Chitambar deceased.

10th—The Punjab Legislative Council met and passed a resolution recommending a representative for the Secretary of State urging that India should in future be officially represented at the Imperial Conference, a number of speeches were made and an important announcement was made by the Viceroy, accepting the resolution which was carried unanimously.

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8th—The Punjab Legislative Council met and passed a resolution recommending a representative for the Secretary of State urging that India should in future be officially represented at the Imperial Conference, a number of speeches were made and an important announcement was made by the Viceroy, accepting the resolution which was carried unanimously.

7th—The Punjab Legislative Council met and passed a resolution recommending a representative for the Secretary of State urging that India should in future be officially represented at the Imperial Conference, a number of speeches were made and an important announcement was made by the Viceroy, accepting the resolution which was carried unanimously.

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4th—The Punjab Legislative Council met and passed a resolution recommending a representative for the Secretary of State urging that India should in future be officially represented at the Imperial Conference, a number of speeches were made and an important announcement was made by the Viceroy, accepting the resolution which was carried unanimously.

3rd—The Punjab Legislative Council met and passed a resolution recommending a representative for the Secretary of State urging that India should in future be officially represented at the Imperial Conference, a number of speeches were made and an important announcement was made by the Viceroy, accepting the resolution which was carried unanimously.

2nd—The Punjab Legislative Council met and passed a resolution recommending a representative for the Secretary of State urging that India should in future be officially represented at the Imperial Conference, a number of speeches were made and an important announcement was made by the Viceroy, accepting the resolution which was carried unanimously.

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## INTEREST TABLE

1 Row 5 to 12 PER CENT ON RUPPEE 100

(Calendar for 1 Year 1 Month (Calendar) 1 Year 1 Day (365 Days to Year), the Definit

Interest	1 Year	1 Month	1 Year
1	0 0 0	0 0 0	0 0 0
2	0 0 0	0 0 0	0 0 0
3	0 0 0	0 0 0	0 0 0
4	0 0 0	0 0 0	0 0 0
5	0 0 0	0 0 0	0 0 0
6	0 0 0	0 0 0	0 0 0
7	0 0 0	0 0 0	0 0 0
8	0 0 0	0 0 0	0 0 0
9	0 0 0	0 0 0	0 0 0
10	0 0 0	0 0 0	0 0 0
11	0 0 0	0 0 0	0 0 0
12	0 0 0	0 0 0	0 0 0

1st—A previously arranged a cricket match between sides captained respectively by the Governor and H. H. the Maharaja of Pithia, the latter representing England and the latter India, the players being selected in both cases from all over India. The Indian team won the toss and batted first.

12th—The cricket match, England vs India, in Bombay resulted in a win for the English team by an innings and 263 runs. After play, H. H. the Maharaja of Nawangan offered H. H. the Governor's bat and the five cricket balls used in the game for sale by auction. H. H. the Maharaja of Pithia bought the bat for Rs. 7,500 and the five balls sold separately, realised a total sum of Rs. 742.

17th—Death at Bombay at the age of 56 of Mr. Louis Joseph Dinshaw Petit millowner and millionaire.

18th—The second match of the Bombay cricket carnival, which was between the Parsees and the Hindus ended in a draw after an exciting finish. The Women's Branch of the Bombay Presidency War and Relief Fund in aid of which the carnival was inaugurated, benefited by about Rs. 30,000.

22nd—The Governor of Bombay Lady Willingdon and party left Bombay for a tour.

25th—The commandant in chief in India published a message from H. H. the King, Emperor conveying His Majesty's and H. H. the Queen's Imperial wishes for the new year to all who, on 1st and 2nd, were upholding the honour of the British name.

26th—H. H. the Viceroy spent Christmas at the Maharaja's guest at H. H. the Maharaja's residence at Kew. The Viceroy's Christmas party was held at the 171 Mahal Hotel and attendance was limited to the members of the League only.

27th—The sittings of the Legislative Council of India were held in the Town Hall on 26th and 27th.

28th—The sittings of the Legislative Council of India were held in the Town Hall on 28th and 29th.

29th—The sittings of the Legislative Council of India were held in the Town Hall on 29th and 30th.

30th—The sittings of the Legislative Council of India were held in the Town Hall on 30th and 31st.

31st—The sittings of the Legislative Council of India were held in the Town Hall on 31st and 1st.

1st—The sittings of the Legislative Council of India were held in the Town Hall on 1st and 2nd.

2nd—The sittings of the Legislative Council of India were held in the Town Hall on 2nd and 3rd.

3rd—The sittings of the Legislative Council of India were held in the Town Hall on 3rd and 4th.

4th—The sittings of the Legislative Council of India were held in the Town Hall on 4th and 5th.

5th—The sittings of the Legislative Council of India were held in the Town Hall on 5th and 6th.

6th—The sittings of the Legislative Council of India were held in the Town Hall on 6th and 7th.

7th—The sittings of the Legislative Council of India were held in the Town Hall on 7th and 8th.

8th—The sittings of the Legislative Council of India were held in the Town Hall on 8th and 9th.

9th—The sittings of the Legislative Council of India were held in the Town Hall on 9th and 10th.

10th—The sittings of the Legislative Council of India were held in the Town Hall on 10th and 11th.

11th—The sittings of the Legislative Council of India were held in the Town Hall on 11th and 12th.

12th—The sittings of the Legislative Council of India were held in the Town Hall on 12th and 13th.

13th—The sittings of the Legislative Council of India were held in the Town Hall on 13th and 14th.

14th—The sittings of the Legislative Council of India were held in the Town Hall on 14th and 15th.

15th—The sittings of the Legislative Council of India were held in the Town Hall on 15th and 16th.

16th—The sittings of the Legislative Council of India were held in the Town Hall on 16th and 17th.

17th—The sittings of the Legislative Council of India were held in the Town Hall on 17th and 18th.

18th—The sittings of the Legislative Council of India were held in the Town Hall on 18th and 19th.

19th—The sittings of the Legislative Council of India were held in the Town Hall on 19th and 20th.

20th—The sittings of the Legislative Council of India were held in the Town Hall on 20th and 21st.

21st—The sittings of the Legislative Council of India were held in the Town Hall on 21st and 22nd.

22nd—The sittings of the Legislative Council of India were held in the Town Hall on 22nd and 23rd.

23rd—The sittings of the Legislative Council of India were held in the Town Hall on 23rd and 24th.

24th—The sittings of the Legislative Council of India were held in the Town Hall on 24th and 25th.

25th—The sittings of the Legislative Council of India were held in the Town Hall on 25th and 26th.

26th—The sittings of the Legislative Council of India were held in the Town Hall on 26th and 27th.

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4th—The sittings of the Legislative Council of India were held in the Town Hall on 4th and 5th.

5th—The sittings of the Legislative Council of India were held in the Town Hall on 5th and 6th.

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Table 1. Summary of the results of the analysis of variance for the effect of the treatment on the yield of the different components of the plant.									
Component	Control			Fertilizer			Irrigation		
	Yield (kg/ha)	Standard Error	Significance	Yield (kg/ha)	Standard Error	Significance	Yield (kg/ha)	Standard Error	Significance
Stems	1.2	0.1	0.05	1.5	0.1	0.01	1.8	0.1	0.001
Leaves	2.5	0.2	0.01	3.0	0.2	0.001	3.5	0.2	0.0001
Flowers	0.8	0.1	0.05	1.0	0.1	0.01	1.2	0.1	0.001
Fruit	4.0	0.3	0.001	5.0	0.3	0.0001	6.0	0.3	0.00001
Roots	1.0	0.1	0.05	1.2	0.1	0.01	1.5	0.1	0.001
Stems + Leaves	3.7	0.3	0.001	4.5	0.3	0.0001	5.3	0.3	0.00001
Flowers + Fruit	4.8	0.4	0.001	6.0	0.4	0.0001	7.2	0.4	0.00001
Stems + Flowers + Fruit	6.0	0.5	0.001	7.5	0.5	0.0001	9.0	0.5	0.00001
Stems + Leaves + Flowers + Fruit	9.5	0.7	0.001	11.5	0.7	0.0001	13.5	0.7	0.00001
Stems + Leaves + Flowers + Fruit + Roots	11.5	0.8	0.001	14.0	0.8	0.0001	16.5	0.8	0.00001

For values of Rupees from 18 3½d to 18 3¼d

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Chief Clerk of the House of Commons, Mr. H.

Mr. Harcourt.

Mr. Harcourt.

ADVISERS

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Mr. Harcourt.

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WAYS AND MEANS

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For many years Indian time was in a state of chaotic confusion. What was called Madras or Railway time was kept on all the railways and each great centre of population kept its own local time which was not based on any common scientific principle and was divorced from the standards of all other countries. It was with a view to removing this confusion that the Government of India took the matter up in 1904, and addressed to the Local Governments, and through them to all local bodies, a letter which reviewed the situation and made suggestions for the future. The essential points in this letter are indicated below.

"In India we have already a standard time, which is very generally, though by no means universally, recognised. It is the Madras local time, which is kept on all railways and telegraph lines throughout India and which is 5h 21m 10s in advance of Greenwich. Similarly, Kangoon local time is used upon the railways and telegraphs of Burma, and is 6h 24m 47s ahead of Greenwich. But neither of these standards bears a simple and easily remembered relation to Greenwich time.

"The Government of India have several times been addressed by Scientific Societies both in India and in England, and urged to fall into line with the rest of the civilised world. And now the Royal Society has once more returned to the Committee of that Society which advises the Government of India upon matters connected with its observations on 'The Committee's plan that a change from Madras time to that corresponding to a longitude exactly 51° 30' East of Greenwich, which is 6h 24m 47s in advance of present, which is 6h 24m 47s in advance of Greenwich, a Burma Standard Time should be adopted on all the Burmese railways and telegraphs which would be one hour in advance of Indian Standard Time, or 6½ hours ahead of Greenwich time, and would correspond with 97° 30' E longitude. The change would bring Burma time into simple relation, both with European and with Indian time, and would (among other things) simplify telegraphic communication with other countries.

"Standard time will thus have been fixed for railways and telegraphs for the whole of the Indian Empire. Its general adoption for all purposes must be left to the local community in each case. It is difficult to recall, without a sense of bewilderment, the reception of this proposal by various local bodies. To read now the letters that were entertained in the possibilities of human error. The Government scheme left local bodies to decide whether or not they would adopt it. Calcutta decided to retain its own local time, and to day Calcutta time is still twenty-four minutes in advance of Standard Time. In Bombay the first reception of the proposal was hostile, but on reconsideration the Chamber of Commerce decided in favour of it and so did the Municipality. Subsequently the opposing element in the Municipality brought in a side resolution, by which the Municipal clock was put at Bombay time which is thirty-nine minutes behind Standard Time. On the 1st January 1906 all the railway and telegraph clocks in India were put at Indian Standard Time, in Burma the Burma Standard Time, but some universal Calcutta retains its former Calcutta time, but in Bombay local time is retained only in the clock which are maintained by the Municipality and in the establishments of some orthodox Hindus. Elsewhere Standard Time is universal."

possesses one of the first alternatives is, that under the former, the difference between local and standard time can never exceed half an hour whereas under the latter it will even exceed an hour in the extreme cases of Karachi and Quetta. But this inconvenience is believed to be smaller than that of keeping two different times on the Indian system of railways and telegraphs.

"It is proposed, therefore, to put on all the railway and telegraph clocks in India, by 5h 30s. They would then represent a time 5½ hours faster than that of Greenwich, which would be known as Indian Standard Time. And the difference between standard and local time at the places mentioned below would be approximately as follows, the figures representing minutes, and S meaning that the standard time is in advance of or behind local time respectively.—Dibrugarh 51 S, Shillong 38 S, Calcutta 24 S, Allahabad 2 F, Madras 9 F, Karachi 62 F, Quetta 62 F.

"This standard time would be as much as 54 and 55 minutes behind local time at Alanday and Kangoon, respectively, and since the railway system of Burma is not connected with that of India, and already keeps a time of its own, namely, Kangoon local time, it is not suggested that Indian Standard Time should be adopted in Burma. It is proposed, however, that instead of using Kangoon Standard Time as at present, which is 6h 24m 47s in advance of Greenwich, a Burma Standard Time should be adopted on all the Burmese railways and telegraphs which would be one hour in advance of Indian Standard Time, or 6½ hours ahead of Greenwich time, and would correspond with 97° 30' E longitude. The change would bring Burma time into simple relation, both with European and with Indian time, and would (among other things) simplify telegraphic communication with other countries.

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Rs 2	In case of a re-insurance by one Company with another— $\frac{1}{2}$ of duty payable in respect of the original insurance, but not less than 1 anna, or more than 1 R.
0	<b>Power of Attorney</b> —
0	For the sole purpose of procuring the registration of one or more documents in relation to a single transaction or for obtaining execution of one or more such documents
0	When required in suits or proceedings under the Presidency Small Causes Courts Act, 1882
0	Authorising 1 person or more to act in a single transaction other than that mentioned above
1	Authorising not more than 5 persons to act jointly and severally in more than 1 transaction, or generally
5	Authorising more than 5 but not more than 10 persons to act
10	When given for consideration and authorising the Attorney to sell any immovable property—the same duty as a Conveyance for the amount of the consideration
1	In any other case, for each person authorised
0	<b>Protest of Bill or Note</b>
0	<b>Proxy</b>
0	Receipt for value exc Rs 20
0	<b>Shipping Order</b>
0	<b>Surrender of Lease</b> —When duty with which lease is chargeable does not exceed Rs 5—The duty with which such Lease is chargeable
5	In any other case
0	<b>Transfer of Shares</b> —One Half of the duty payable on a Conveyance for a consideration equal to the value of the share
0	<b>Transfer of any Interest secured by a Bond, Mortgage, deed, or Policy or Insurance</b> —If duty on such does not exceed Rs 5—The duty with which such Bond, etc., is chargeable
5	In any other case
0	<b>Transfer of Lease by way of assignment and not by way of under-lease</b> —The same duty as a conveyance for a consideration equal to the amount of the consideration for the transfer
0	<b>Trust, Declaration of—Same duty as a Bond for a sum equal to the amount or value of the property concerned, but not exceeding</b>
15	Reversion of—Ditto, but not exceeding
10	ing
0	11 anna for 500 Rs.

Rs 2	<b>Letter—Allotment of share</b>
0	<b>Credit</b>
0	<b>License</b>
10	<b>Memo of Association of Company</b> —If accompanied by Articles of Association
15	If not so accompanied
40	<b>Notarial Act</b>
1	<b>Note or Memo, intimating the purchase or sale—</b>
0	(a) Of any Goods exceeding in value Rs 20
0	(b) Of any Stock or marketable security exceeding in value Rs 20—subject to a maximum of Rs 10 in 1 for every Rs 10,000, or part
0	<b>Vote of Protest by a ship's Master</b>
8	<b>Partnership</b> —Where the capital does not exceed Rs 500
2	In any other case
10	11 anna for 500 Rs.
5	<b>Policy of Insurance</b> —
0	(1) Sea—Where premium does not exceed rate of 1%, or 1 per cent of amount insured
1	In any other case for Rs 1 500 or part thereof
0	(2) For time—For every Rs 1 000 or part insured, not exc 6 months
2	Exceeding 6 and not exceeding 12 months
0	If drawn in duplicate, for each part—Half the above rate, for sea and fire
0	(3) Fire—When the sum insured does not exceed Rs 5,000
8	In any other case
1	To receipt of each receipt for any payment of a premium on any fire or an original policy—One half of the duty payable in respect of the original policy, in addition to the amount, if any, chargeable under fire (see 10)
0	(4) Accidents and Sickness—Against fire or accident, valid for a single journey only
1	In any other case—for the maximum amount which may become payable in the case of any single accident or fire—Rs 1 000, and also where the sum insured does not exceed Rs 1 000, for every Rs 1 000, for every
0	Life, Sickness, and Accidents—As per special rates for 1000 Rs.





# The Calendars.

A full calendar will be found at the beginning of this book. Below are given details of the other Calendars in use in India.

The *Jewish* Calendar is in accordance with the system arranged A.D. 358. The Calendar dates from the Creation, which is fixed as 4,760 years and 3 months before the beginning of the Christian Era, the year is luni solar.

The *Mohammedan*, or era of the Hejira, dates from the day after Mohammed's flight from Mecca which occurred on the night of July 13, 622 A.D. The months are lunar calendars.

The *Samvat* era dates from 57 B.C., and is luni-solar. The months are divided into two fortnights—*sudi*, or bright, and *vadi*, or dark. Each fortnight contains 15 tithis, which furnish the dates of the civil days given in our calendars.

Solar made it lose 11 days each year.

## PUBLIC HOLIDAYS IN 1916.

### Parsee (Shenshahi)

March	21	Amal Dashin
April	19	Amal Dashin
May	17	Amal Dashin
June	18	Amal Dashin
September	8	Amal Dashin
October	9	Amal Dashin
November	11	Amal Dashin
December	16	Amal Dashin

### Parsee (Kadmi)

March	19	Amal Dashin
April	17	Amal Dashin
May	19	Amal Dashin
August	9	Amal Dashin
September	10	Amal Dashin
October	11	Amal Dashin
November	12	Amal Dashin
December	17	Amal Dashin

### Mahomedan (Sunni)

January	18	Amal Dashin
June	17	Amal Dashin
August	1	Amal Dashin
November	6	Amal Dashin
December	9	Amal Dashin

### Mahomedan (Shiah)

January	5	Amal Dashin
August	1	Amal Dashin
October	7	Amal Dashin
November	6	Amal Dashin

### Hindu

#### Chatur Masik

January	11	Amal Dashin
March	7	Amal Dashin
April	19	Amal Dashin
August	21	Amal Dashin
September	1	Amal Dashin
October	6	Amal Dashin
November	27	Amal Dashin
December	27	Amal Dashin

### Jewish.

April	18	Amal Dashin
June	7	Amal Dashin
August	8	Amal Dashin
September	28	Amal Dashin
October	12	Amal Dashin
November	20	Amal Dashin

#### Kippur

January	18	Amal Dashin
June	17	Amal Dashin
August	1	Amal Dashin
November	6	Amal Dashin
December	9	Amal Dashin

### Jain

January	18	Amal Dashin
June	17	Amal Dashin
August	1	Amal Dashin
November	6	Amal Dashin
December	9	Amal Dashin

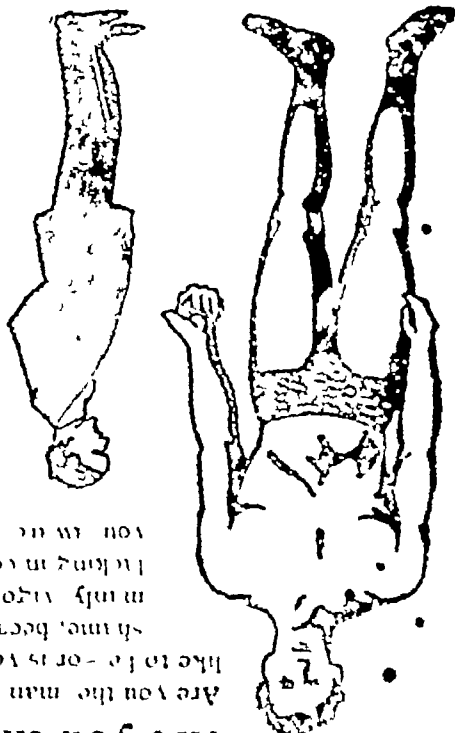
# DR. McPhee's NERVO-VITALO PILLS.

Are you the man you used to be?

Are you the man you ought to be—the man you would like to be—or is your whole life filled with misery, woe and shame, because you know yourself to be lacking in manly vigor, dependent, nervous, unsteady, and lacking in confidence and concentration? And are you aware that if such is the case you cannot go on from day to day and month to month without blighting your whole life and robbing yourself of this world's greatest happiness. And you need not. You can regain your lost vitality and take your place in the ranks of the world's real men if you wish to. But act at once, don't procrastinate until it is too late. Act now before worse complications ensue, now when the lost will be small.

Dr. McPhee's Nervo Vitalo Pills  
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3. It is followed by a description of the  
4. methods used in the investigation.  
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19. to read this report, and to have been  
20. able to learn from the author's work.

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CAPITAL PAID UP

Rs. 1,00,00,000

RESERVE FUND

Rs. 95,00,000

Head Office : BOMBAY.

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KARACHI	AHMEDABAD
POONA	AKOLA.
RAJKOT.	AMRAOTI
SHOLAPUR	BROACH
SUKKUR	HYDERABAD (Sind).
SURAT	INDORE
	JALGAON

CURRENT ACCOUNT—Opened free of charge

FIXED DEPOSITS—Received for twelve months and also for short periods and interest allowed at rates which may be ascertained on application

SAVINGS BANK DEPOSITS—Received and interest allowed thereon at three per cent per annum

LOANS AND CASH CREDITS—Granted on the security of Government Securities, Municipal and Port Trust Debentures, City of Bombay Improvement Trust Debentures, Shares in Guaranteed Railways, Goods and Bullion

DISCOUNT ACCOUNTS—Opened and approved Mercantile Bills discounted.

GOVERNMENT AND OTHER SECURITIES—Received for safe custody, Purchases and Sales effected and Interest and Dividends collected

Copies of Rules, Powers of Attorney, &c, may be had on application at the Head Office and at any of the Branches

R. ATKEN,

Secretary and Treasurer.

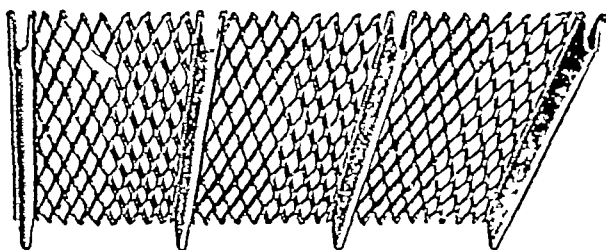
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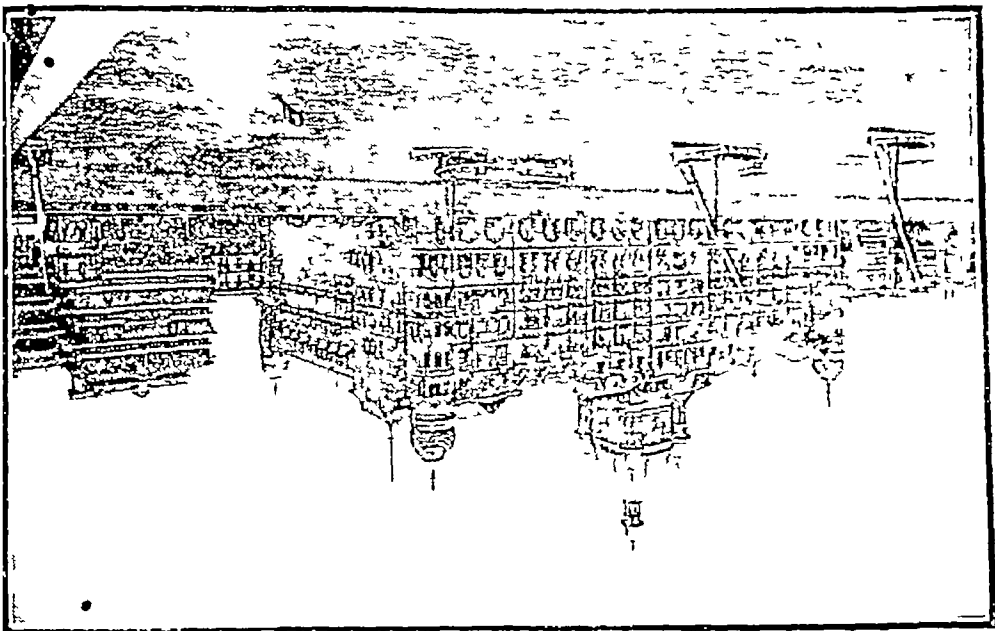
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# The Yokohama Specie Bank, Ltd

(REGISTERED IN JAPAN)

(ESTABLISHED 1880.)

48,000,000	YEN	...	...	...	SUBSCRIBED CAPITAL
30,000,000	"	..	.	.	PAID-UP CAPITAL
20,000,000	"	...	...	...	RESERVE FUND

Head Office . YOKOHAMA, JAPAN.

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 DAIREN (DALNY), RYOJUN (PORT ARTHUR), NEW-  
 CHWANG, TIEHLING, FENGTIEN (MUKDEN),  
 LIAOYANG, CHANGCHUN, ANTUNG-HSIEN, HAR-  
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Current Deposit Accounts are opened for approved customers,  
 and Interest is allowed at two per cent per annum on daily  
 balances of Rs 1,000 up to Rs 1,00,000, provided that the  
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 Fixed Deposits are received for one year and shorter periods on  
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